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SESSIONAL PAPERS

VOLUME 11

SECOND SESSION OF THE NINTH PARLIAMENT

OF THE

DOMINION OF CANADA

SESSION 1902

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3. Estimates of sums required for the services of Canada, for the year ending on the 30th June, 1903, Presented 17th February, 1902, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

4. Supplementary Estimates for the year ending 30th June, 1902. Presented 6th March, 1902, by Hon. W. S. Fielding. ..... *Printed for both distribution and sessional papers.*

5. Further Supplementary Estimates for the year ending 30th June, 1902. Presented 30th April, 1902, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

5*a*. Supplementary Estimates for the year ending 30th June, 1903. Presented 7th May, 1902, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

5*b*. Further Supplementary Estimates for the year ending 30th June, 1902. Presented 7th May, 1902, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

5*c*. Further Supplementary Estimates for the year ending 30th June, 1902. Presented 14th May, 1902, by Hon. W. S. Fielding..... *Printed for both distribution and sessional papers.*

6. List of Shareholders in the Chartered Banks of Canada, as on the 31st December, 1901. Presented 21st April, 1902, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

7. Report of dividends remaining unpaid, unclaimed balances and unpaid drafts and bills of exchange in Chartered Banks of Canada, for five years and upwards, prior to December, 1901. Presented 9th May, 1902, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

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8. Report of the Superintendent of Insurance, for the year ended 31st December, 1901.

Printed for both distribution and sessional papers.

9. Abstract of Statements of Insurance Companies in Canada, for the year ended 31st December, 1901. Presented 26th March, 1902, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

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10. Report of the Department of Trade and Commerce, for the fiscal year ended 30th June, 1901. Presented 18th February, 1902, by Sir Richard Cartwright.
Printed for both distribution and sessional papers.

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11. Tables of the Trade and Navigation of Canada, for the fiscal year ended 30th June, 1901. Presented 18th February, 1902, by Hon. W. Paterson.. . *Printed for both distribution and sessional papers.*

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12. Inland Revenues of Canada. Excise, etc., for the fiscal year ended 30th June, 1901. Presented 27th February, 1902, by Hon. W. S. Fielding.....*Printed for both distribution and sessional papers.*

13. Inspection of Weights, Measures, Gas and Electric Light, for the fiscal year ended 30th June, 1901. Presented 27th February, 1902, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

14. Report on Adulteration of Food, for the fiscal year ended 30th June, 1901. Presented 17th February, 1902, by Hon. W. S. Fielding..... *Printed for both distribution and sessional papers.*

15. Report of the Minister of Agriculture, for the year ended 31st October, 1901. Presented 21st February, 1902, by Hon. S. A. Fisher .....*Printed for both distribution and sessional papers.*

16. Report of the Directors and Officers of the Experimental Farms, for the year 1901. Presented 8th April, 1902, by Hon. S. A. Fisher.. . .....*Printed for both distribution and sessional papers.*

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17. Criminal Statistics for the year 1901..... ... .*Printed for both distribution and sessional papers.*

18. Report on Canadian Archives, 1901. Presented 23rd April, 1902, by Hon. S. A. Fisher.
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19. Report of the Minister of Public Works, for the fiscal year ended 30th June, 1901. Presented 17th February, 1902, by Hon. J. I. Tarte.....*Printed for both distribution and sessional papers.*

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20. Annual Report of the Department of Railways and Canals, for the fiscal year ended 30th June, 1901. Presented 19th February, 1902, by Hon. A. G. Blair.*Printed for both distribution and sessional papers.*

20*a*. Reports upon Railway Commissions, Railway Rate Grievances, and Regulative Legislation.
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21. Report of the Department of Marine and Fisheries (Marine), for the fiscal year ended 30th June, 1901. Presented 19th February, 1902, by Hon. J. Sutherland.
Printed for both distribution and sessional papers.

21*a*. Third Annual Report of the Geographic Board of Canada, 1901.
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21*b*. List of Shipping issued by the Department of Marine and Fisheries, being a List of Vessels on the registry books of Canada, on the 31st December, 1901.
Printed for both distribution and sessional papers.

22. Report of the Department of Marine and Fisheries (Fisheries), for the fiscal year ended 30th June, 1901. Presented 26th February, 1902, by Hon. J. Sutherland.
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22*a*. Contributions to Canadian Biology, being studies from the Marine Biological Station of Canada, 1901.
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22*b*. Special Reports on the Hatching and Planting of Trout; the Propagation and Planting of Predaceous Fish, and the Aim and Basis of Fishery Regulations.
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23. Report of the Harbour Commissioners, etc., 1901....*Printed for both distribution and sessional papers.*

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24. Report of the Postmaster General, for the year ended 30th June, 1901. Presented 17th February, 1902, by Hon. W. Mulock .....*Printed for both distribution and sessional papers.*

25. Annual Report of the Department of the Interior, for the fiscal year ended 30th June, 1901. Presented 20th February, 1902, by Hon. C. Sifton.....*Printed for both distribution and sessional papers.*

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26. Summary Report of the Geological Survey Department for the calendar year 1901. Presented 14th April, 1902, by Hon. C. Sifton.....*Printed for both distribution and sessional papers.*

27. Annual Report of the Department of Indian Affairs, for the fiscal year ended 30th June, 1901. Presented 20th February, 1902, by Hon. C. Sifton.*Printed for both distribution and sessional papers.*

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28. Report of the North-west Mounted Police, 1901. Presented 12th March, 1902, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.

29. Report of the Secretary of State of Canada, for the year ended 31st December, 1901. Presented 27th February, 1902, by Hon. C. Fitzpatrick..... .... *Printed for both distribution and sessional papers.*

30. Civil Service List of Canada, 1901. Presented 19th February, 1902, by Hon. C. Fitzpatrick.
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31. Report of the Board of Civil Service Examiners, for the year ended 31st December, 1901. Presented 20th March, 1902, by Hon. H. G. Carroll.....*Printed for both distribution and sessional papers.*

32. Annual Report of the Department of Public Printing and Stationery, for the year ended 30th June, 1901. Presented 27th February, 1902, by Hon. C. Fitzpatrick.
Printed for both distribution and sessional papers.

33. Report of the Joint Librarians of Parliament for the year 1901. Presented 13th February, 1902, by the Hon. The Speaker.....*Printed for sessional papers.*

34. Report of the Minister of Justice as to Penitentiaries of Canada, for the year ended 30th June, 1901. Presented 17th February, 1902, by Hon. C. Fitzpatrick.
Printed for both distribution and sessional papers.

35. Report of the Department of Militia and Defence of Canada, for the year ended 31st December, 1901. Presented 17th March, 1902, by Hon. F. W. Borden.
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36. Report of the Department of Labour, for the year ended 30th June, 1901. Presented 17th February, 1902, by Hon. W. Mulock.....*Printed for both distribution and sessional papers.*

37. Statement of Governor General's Warrants issued since the last session of parliament, on account of the fiscal year 1901-02. Presented 17th February, 1902, by Hon. W. S. Fielding.....*Not printed.*

38. Statement of all superannuations and retiring allowances in the civil service during the year ended 31st December, 1901, showing name, rank, salary, service, allowance and cause of retirement of each person superannuated or retired, also whether vacancy filled by promotion or by new appointment, and salary of any new appointee. Presented 17th February, 1902, by Hon. W. S. Fielding.
Not printed.

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39. Statement of receipts and expenditures of the Ottawa Improvement Commission, for the fiscal year ended 30th June, 1901. Presented 17th February, 1902, by Hon. W. S. Fielding.....*Not printed.*

40. Return showing the expenditure on account of unforeseen expenses from the 1st July, 1901, to the 13th February, 1902. Presented 17th February, 1902, by Hon. W. S. Fielding.....*Not printed.*

41. Statement in pursuance of section 17, of the Civil Service Insurance Act, for the fiscal year ended 30th June, 1901. Presented 17th February, 1902, by Hon. W. S. Fielding. . . . . *Not printed.*

42. Return to an address of the House of Commons, dated 19th February, 1902, for copy of all papers and correspondence exchanged between Canadian and British authorities, with reference to the embargo imposed by the British government on Canadian cattle. Presented 6th March, 1902.—*Mr. Bourassa*... ... .*Not printed.*

43. Return of over-rulings by the treasury board of the auditor general's decisions between the commencement of the session of 1901 and the session of 1902. Presented 18th February, 1902, by Hon. W. S. Fielding..... .... *Not printed*

44. Detailed statement of all bonds and securities registered in the department of the secretary of state of Canada, since last return, 11th February, 1901, submitted to the parliament of Canada under section 23, chapter 19 of the Revised Statutes of Canada. Presented 19th February, 1902, by Hon. C. Fitzpatrick..... ....*Not printed.*

45. Orders of the Exchequer Court. Presented 19th February, 1902, by Hon. C. Fitzpatrick. *Not printed.*

45*a*. Rules of the Exchequer Court, pursuant to 52 Victoria, chapter 38, section 2. Presented 19th March, 1902, by Hon. H. G. Carroll..... .....*Not printed.*

46. Ordinances passed by the Yukon council during the year 1901. Presented 19th February, 1902, by Hon. C. Fitzpatrick.....*Not printed.*

47. Return of the names and salaries of all persons appointed to or promoted in the Civil Service of Canada during the year 1901. Presented 19th February, 1902, by Hon. C. Fitzpatrick..*Not printed.*

48. Copy of a report of the committee of the honourable the privy council, approved by his excellency on the 23rd January, 1902, relative to a proposed increase of the capital stock of the Canadian Pacific Railway Company, by twenty millions of dollars and correspondence relating thereto. Presented 19th February, 1902, by Sir Wilfrid Laurier..... .....*Printed for sessional papers.*

49. Copy of a report of the committee of the honourable the privy council, approved by his excellency on the 31st May, 1901, relating to a contract with the American Bank Note Company and correspondence relating thereto. Presented 20th February, 1902, by Hon. W. S. Fielding.

Printed for sessional papers.

50. Annual return under chapter 131 (R.S.C), intituled : "An Act respecting Trade Unions." Presented 21st February, 1902, by Hon. C. Fitzpatrick..... ....*Not printed.*

51. Return to an order of the House of Commons, dated 26th February, 1902, for a copy of the correspondence relating to an agreement made between the government of Canada and the Marconi's Wireless Telegraph Company, Limited. Presented 26th February, 1902, by Sir Wilfrid Laurier.

Not printed.

51*a*. Memorandum of agreement made the seventeenth day of March, 1902, between Marconi's Wireless Telegraph Company, Limited, and the Marconi International Marine Communication Company, Limited, and His Majesty King Edward Seventh, represented herein by the Right Honourable Sir Wilfrid Laurier, G.C.M.G., President of the King's Privy Council for Canada. Presented 15th April, 1902, by Sir Wilfrid Laurier.....*Printed for sessional papers.*

52. Report of the Commissioner, Dominion Police Force, for the year 1901. Presented 26th February, 1902, by Hon. C. Fitzpatrick ....*Not printed.*

53. Report of Commissioner and other documents in connection with the Royal Commission in *re* the alleged combination of paper manufacturers and dealers. Presented 21st April, 1902, by Hon. W. S. Fielding..... .... *Printed for both distribution and sessional papers.*

54. Report of the Royal Commission on Chinese and Japanese Immigration. Part I.—Chinese Immigration. Presented 27th February, 1902, by Sir Wilfrid Laurier. Part II.—Japanese Immigration, together with all the evidence taken before the said Commission. Presented 14th April, 1902, by Sir Wilfrid Laurier.. .. ..*Printed for both distribution and sessional papers.*

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55. Statement of the affairs of the British Canadian Loan and Investment Company, as on the 31st December, 1901. Presented 3rd March, 1902, by the Hon. The Speaker.....*Not printed.*

56. Return to an order of the House of Commons, dated 19th February, 1902, showing the names and number of men employed on the 200 acres set apart at the Central Experimental Farm, Ottawa, as a farm proper to be handled as a farm, that is, as any farmer's farm might be handled; mentioned in the evidence of J. H. Grisdale, Esq., given Thursday, April 11th, 1901, at the morning session of the select standing committee on agriculture and colonization. The number of employees and the wages paid to each employee. The total crop of various kinds grown on said 200 acres, and the amount said total crop was sold for. Presented 4th March, 1902.—*Mr. Wilson*.....*Not printed.*

57. Supplementary return to an order of the House of Commons, dated 18th February, 1901, for copies of all correspondence, telegrams, letters, notes and memoranda exchanged between the Canadian commissioner at the Paris exhibition, or any member of the Canadian commission, and Lord Strathcona or the royal commission or the colonial secretary, in relation to the representation of Canada at the exhibition. Presented 4th March, 1902.—*Mr. Bourassa*.....*Not printed.*

57*a*. Report of the Canadian Commission at the Paris exhibition. Presented 22nd April, 1902, by Hon. S. A. Fisher.....*Not printed.*

58. Return to an order of the House of Commons, dated 19th February, 1902, for correspondence between the department of the interior or the minister of the interior, and Mr. C. R. Devlin, with reference to a letter that appeared in *United Canada* on 11th May, 1901, and a letter that appeared in the *Montreal Herald* on the 18th May, 1901; in both of said letters Mr. C. R. Devlin made certain statements regarding members of this house. Presented 6th March, 1902.—*Mr. Wilson.*

Not printed.

59. Return to an order of the House of Commons, dated 19th February, 1902, showing: 1. The names of all employees in the post office at Belleville, Ontario, on June 30th, 1896, together with the age of each, date of entry in the service, and the salary of each on the said date. 2. The number of employees dismissed from the Belleville post office since June 30th, 1896, with cause and date of dismissal. 3. The number of employees superannuated, the date of their superannuation, reason for their superannuation, how much superannuation allowance has been allowed to each; giving the names of all said employees so superannuated who have asked to be superannuated. 4. How many employees were employed in the Belleville post office on 1st January, 1902; what were their names and the age and salary of each employee on said date, and date of appointment. Presented 7th March, 1902.—*Mr. Wilson*.....*Not printed.*

59*a*. Return to an order of the House of Commons, dated 10th March, 1902, for a list of the names of all permanent and temporary officials employed in the Winnipeg post office since the 1st of July, 1896; date of appointment, length of service, and salary up to the 1st of January, 1902. Presented 3rd April, 1902.—*Mr. LaRivière*.....*Not printed.*

59*b*. Return to an order of the House of Commons, dated 28th April, 1902, of copies of all tenders received by the post office department in June, 1901, for carrying mail between Hamilton and Guelph. Presented 7th May, 1902.—*Mr. Smith (Wentworth)*.....*Not printed.*

59*c*. Return to an order of the House of Commons, dated 14th April, 1902, for copies of all petitions, correspondence and any and all other documents addressed by any person or persons to the honourable the postmaster general upon which he or the department acted in dismissing, or which led to the dismissal of David Clinton, lately postmaster at Wellington, Ontario. Presented 9th May, 1902.—*Mr. Alcorn*.....*Not printed.*

59*d*. Return to an order of the House of Commons, dated 28th April, 1902, for a copy of the petition sent to the government asking for the dismissal of Mr. H. Therien, postmaster at Grandes Piles, in the province of Quebec; and copies of all correspondence between the government and all persons interested in the subject of such dismissal. Presented 14th May, 1902.—*Mr. Ball*.....*Not printed.*

59*e*. Return to an order of the House of Commons, dated 9th April, 1902, for copies of all correspondence, petitions, affidavits and documents relating to the dismissal of Alphonse Thomas as postmaster at La Prairie, P.Q. Presented 14th May, 1902.—*Mr. Monk*.....*Not printed.*

60. Return to an order of the House of Commons, dated 27th February, 1902, for copies of all letters, telegrams and other correspondence between the department of labour and the Canadian Pacific Railway, Mr. John Wilson and other parties, in respect of alleged violations of the Alien Labour Law, between June 1st and September 1st, 1901. Also between officers of the immigration department and the Canadian Pacific Railway. Presented 7th March, 1902.—*Mr. Puttee*.....*Not printed.*

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61. Return to an order of the House of Commons, dated 3rd March, 1902, showing:—1. All contracts awarded by the department of railways and canals during the year ending June 30th, 1901, in which the "Current Wages" clause was incorporated, and the amount of such contracts. 2. The number of such contracts in which the schedule of wages was prepared by the fair wages officers. 3. The number of such contracts in which the schedule of wages was prepared by the contractors and accepted by the department. 4. The number of such contracts which were unaccompanied by schedule of wages. 5. The number of contracts awarded by the department of railways and canals which did not contain either the "Current Wages" clause or a schedule of wages. Presented 11th March, 1902.—*Mr. Puttee*.....*Not printed.*

62. Report on the trend of farm land values as indicated by the selling price. Presented 11th March, 1902, by Hon. S. A. Fisher.. ..... *Not printed.*

63. Return to an order of the House of Commons, dated 27th February, 1902, showing: 1. Whether the government or any member thereof, by letter or otherwise, gave any public or private assurance that in the selection of officers for the Canadian South African constabulary, which left for South Africa, last year, preference would be given to those Canadian officers who have served in South Africa and to other officers of the Canadian militia. 2. What persons, officers or others, applied for commissions in said constabulary. What is the military record of each, either in Canada, South Africa or elsewhere 3. (*a*). What officers were selected and appointed; (*b*). What is the military record of each. 4. Who of those selected as officers had never before been officers. 5. Whether there were enough applications from officers of the Canadian militia to officer the constabulary, and the reason for their being passed over, and men without qualification, if there were any such, selected. 6. How many commissioned officers of the Canadian militia were enlisted in the first and second contingents, in the Royal Canadian Regiment, the Canadian Mounted Infantry, the Royal Canadian Dragoons, and the Canadian Artillery, as (*a.*) non-commissioned officers and (*b.*) as men. 7. How many non-commissioned officers and men of the permanent corps were enlisted in the corps named in question. How many of these were non-commissioned officers in South Africa. (*c.*) Why were the commissioned officers enlisted in the corps as privates, not given the non-commissions. Presented 11th March, 1902.—*Mr. Monk*.....*Not printed.*

64. Return to an address of the House of Commons, dated 19th February, 1902, for a copy of all papers and correspondence relating to the coronation of his majesty the king; the imperial conference which is to be held in London, and the appointment of Canadian delegates to the same. Presented 11th March, 1902.—*Mr. Bourassa*.....*Printed for sessional papers.*

65. Return to an address of the House of Commons, dated 19th February, 1902, for: 1. Copies of all applications for any portion of the ground covered by the Matson concession (so-called), or lease No. 9, in the Yukon district. 2. Copies of all applications for any portion of the ground covered by the Doyle concession (so-called), in the Yukon district. 3. Copies of all applications for any portion of the ground covered by the Bronson & Ray concession, in the Yukon district. 4. A memorandum showing the date on which the application in the Bronson & Ray concession was granted. 5. Copy of the application for all lay-overs in all these cases. 6. Copies of orders in council or other authority under which the minister of the interior granted any lay-over in these cases; and copy of the material, reports or other evidence upon which such lay-overs were granted. 7. A description of the Boyle concession and a map of same. 8. Copy of the application for Boyle concession. 9 The exact terms of the application in the case of the Milne concession. 10. The dates on which this application was made and granted. 11. Map showing ground covered. 12. The date when the application for the Slavin & Gates concession was made and filed. 13. Copy of Green's original map, with copy of field notes attached in the case of the Slavin & Gates concession. 14. Copy of telegram from the deputy minister of interior to E. C. Senkler as to the boundaries of this concession, dated on or about the 5th June, 1901. Presented 12th March, 1902.—*Mr. Taylor* .... *Not printed.*

66. Return to an order of the House of Commons, dated 20th February, 1902, for a statement in detail showing the quantity of vegetables imported from the United States and entered at the ports of Montreal and Toronto during the years 1900 and 1901, respectively, as well as of the amount of duties collected by the government of Canada during the said two years at each one of the said ports. Presented 14th March, 1902.—*Mr. Léonard*.....*Not printed.*

66*a*. Return to an order of the House of Commons, dated 20th February, 1902, for copies of all petitions, resolutions, letters, etc., addressed to the government in relation to an increase or a readjustment of the duties on vegetables, and of all replies sent by the government to said resolutions, petitions and letters. Presented 24th March, 1902.—*Mr. Léonard*.....*Not printed.*

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67. Return to an address of the House of Commons, dated 19th February, 1902, for a copy of all papers and correspondence relating to the disallowance of chapters 11 and 14 of the Statutes of 1900, province of British Columbia, viz. : "An Act to regulate immigration into British Columbia," and "An Act relating to the employment on works carried on under franchises granted by Private Acts." Presented 17th March, 1902.—*Mr. Bourassa*.....*Not printed.*

68. Return to an order of the House of Commons, dated 19th February, 1902, showing : 1. The amount of money spent each year from June 30th, 1891, to June 30th, 1901, on immigration. 2. The number of immigrants reported each year to have settled each year in the Dominion of Canada during the ten (10) years from 1891 to 1901, and the total for the ten years. 3. The number of immigrant agents employed by the Dominion government each year in Great Britain and Ireland from 1891 to 1901, and the total amount paid each year to the said agents, and the amount spent each year for printing and other expenses by the said agents. 4. The number of immigrant agents employed by the Dominion government each year in the continent of Europe from 1891 to 1901, and the total amount paid each year to the said agents, and the amount spent each year for printing and other expenses by the said agents. 5. The number of immigrant agents employed by the Dominion government each year in the United States of America from 1891 to 1901; and the total amount paid each year to the said agents; and amounts spent each year for printing and other expenses by the said agents; and by the government of the Dominion of Canada. Presented 18th March, 1902.—*Mr. Wilson*.....*Printed for sessional papers.*

69. Statement for parliament relative to fishing bounty payments for the year 1900-1901, required under section 4, of chapter 96, of the Revised Statutes of Canada, intituled : "An Act to encourage the development of the sea fisheries and the building of fishing vessels." Presented (Senate) 19th March, 1902, by Hon. R. W. Scott.....*Not printed.*

70. Return of all lands sold by the Canadian Pacific Railway Company, from the 1st October, 1900, to the 1st October, 1901. Presented 21st March, 1902, by Hon. W. S. Fielding.....*Not printed.*

70*a*. Return (in so far as the department of the interior is concerned) of copies of all orders in council, plans, papers and correspondence which are required to be presented to the House of Commons, under a resolution passed on 20th February, 1882, since the date of the last return under such resolution. Presented 21st March, 1902, by Hon. W. S. Fielding.....*Not printed.*

71. Return to an address of the House of Commons, dated 3rd March, 1902, for copies for all applications for water powers and other similar rights on or connected with the Soulanges canal, and all correspondence with respect thereto, and all reports, letters and communications of or from engineers or other experts respecting the same. Also all leases granted to any person, firm or corporation of water powers or other similar rights on or connected with the above named canal. Presented 20th March, 1902—*Mr. Bennett*.....*Not printed.*

72. Return to an order of the House of Commons, dated 26th February, 1902, showing amount of the rebate paid on agricultural implements exported from Canada for the fiscal year ending 30th June, 1901, specifying amount paid to each firm. Presented 20th March, 1902—*Mr. Henderson. Not printed.*

73. Return to an order of the House of Commons, dated 6th March, 1902, showing : 1. The amount of refined sugar imported into Canada *(a)* from the first of January to 31st December, 1900 ; *(b)* from the first of January to the 31st of December, 1901 ; 2. The amount of raw sugar imported within same dates, each year separate, and the name of the country from which it has been imported. Presented 20th March. 1902—*Mr. Madore*.....*Not printed,*

74. Return to an order of the House of Commons, dated 10th March, 1902, for a tracing showing the principal railway lines in operation in New Brunswick, and showing the railway lines, or portions of such lines, over which postal cars are run. Presented 24th March, 1902—*Mr. Costigan*. *Not printed.*

75. Return of orders in council, which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, between 1st January and 31st December, 1901, in accordance with the provisions of subsection *(d)* of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile railway belt in the province of British Columbia. Presented 21st March, 1902, by Hon. W. S. Fielding.....*Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

75*a*. Return of orders in council which have been published in the *Canada Gazette* between 1st January and 31st December, 1901, in accordance with the provisions of clause 91 of the Dominion Lands Act, chapter 54 of the Revised Statutes of Canada and its amendments. Presented 21st March, 1902, by Hon. W. S. Fielding..... *Not printed.*

76. Return of orders in council which have been published in the *Canada Gazette* between 1st January and 31st December, 1901, in accordance with the provisions of section 52 of the North-west Irrigation Act, chapter 35 of 61 Victoria. Presented 21st March, 1902, by Hon. W. S. Fielding.—*Not printed.*

77. Return to an address of the House of Commons, dated 19th February, 1902, for copies of all letters, telegrams and other correspondence between the governments of Canada, Australia and New Zealand or any member thereof, respecting trade transportation, cable and other subjects of intereolonial concern. Presented 26th March, 1902—*Mr. Campbell* ..... *Printed for sessional papers.*

78. Return to an order of the House of Commons, dated 10th March, 1902, for list of the names of all permanent and temporary officials of the several branches of the department of the interior, date of appointment, and their salaries, on the 1st July, 1896; also a similar list on the 1st July, 1901. Presented 26th March, 1902.—*Mr. LaRivière*..... *Not printed.*

79. Return to an order of the House of Commons, dated 21st February, 1901, of all papers, reports and other data relative to the lowering of the waters of Lake Simcoe, with a view towards reclaiming certain flooded lands. Presented 26th March, 1902.—*Mr. McLeod*..... *Not printed.*

80. Return to an address of the House of Commons, dated 27th February, 1902, for a copy of the report from the judicial committee of the privy council, dated the 8th day of December, 1901, in the matter of an appeal from the court of king's bench for the province of Quebec (appeal side) between the Canadian Pacific Railway Company, appellant, and Adrien Roy, respondent. Presented 7th April, 1902.—*Mr. Lemieux* ..... *Not printed.*

81. Orders in council with respect to the application made by Messrs. Ewing, Treadgold and Barwick, to divert water for mining purposes. Presented 8th April, 1902, by Hon. C. Sifton.
Printed for both distribution and sessional papers.

81*a*. Partial return to an address of the House of Commons, dated 9th April, 1902: 1. For copies of all orders in council, petitions, applications, reports, telegrams, correspondence, grants, contracts, agreements, documents, and communications in writing, relating to or concerning the grant to or concession to A. N. C. Treadgold and others, or to the Hydraulic Mining Syndicate, either separately or associated with A. N. C. Treadgold, of any claims, rights, and privileges on Bonanza, Bear and Hunker Creeks or their tributaries, or elsewhere in the Yukon territory. 2. A description and plan showing the situation, location, area, and other particulars of all the claims, rights, and privileges so granted or conceded to the said A. N. C. Treadgold and others, or to the said Hydraulic Mining Syndicate, as aforesaid. Presented 23rd April, 1902.—*Mr. Borden (Halifax).*
Printed for both distribution and sessional papers.

81*b*. Return to an order of the House of Commons, dated 9th April, 1902, indicating: 1. The names of all grantees of permits to cut timber in the Yukon, to whom permits, licenses or leases have been issued since the 1st January, 1899. 2. The location of such grants. 3. The annual amount payable by the grantee, licensee or lessee. 4. The price or consideration of the grant. 5. The name in each case of the present holder of grant or lease, if transferred. 6. Whether each and every grant was publicly advertised for sale by auction. Presented 29th April, 1902.—*Mr. Monk*..... *Not printed.*

82. Return showing the reductions and remissions under section 141 as added to the Indian Act by section 8, chapter 35, 58-59 Victoria, during the fiscal year ended 30th June, 1901. Presented (Senate) 8th April, 1902, by Hon. R. W. Scott..... *Not printed.*

83. Return to an address of the Senate, dated 20th February, 1902, for copies of all orders in council, documents, memoranda, or other papers, relating to the transfer, from the federal to the provincial control, of public lands alloted for education in Manitoba, or relating to the payment by this government to the Manitoba government of any money—whether it be on the capital or on the interest—derived from the sales of such lands; also copies of all correspondence between the government or any member thereof, and the government of Manitoba or any member thereof, or any other persons, up to this date, in connection with the above matters. Presented (Senate) 9th April, 1902.—*Hon. Mr. Bernier*..... *Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 13—*Continued.*

83*a*. Return to an address of the House of Commons, dated 19th February, 1902, for a copy of all correspondence, petitions, orders in council, and any and all documents in connection with the demands of the provincial legislature, with regard to the school lands in Manitoba; moneys derived from sales thereof, together with interest accrued thereon. Presented 25th April, 1902.—*Mr. LaRivière.*
Incorporated with 83.

84. Return to an address of the House of Commons, dated 9th April, 1902, for copies of all correspondence, papers, letters, telegrams, etc., between the department of justice and the authorities of the St. Vincent de Paul Penitentiary, relating to the leave granted to the present warden, as well as that which passed respecting the superannuation of the said warden. Presented 21st April, 1902.—*Mr. Léonard*.....*Not printed.*

84*a*. Return to an order of the House of Commons, dated 9th April, 1902, for copies of all correspondence, letters, claims, etc., addressed to the government in regard to the indemnity of Treffle Nantel, a guard at the St. Vincent de Paul Penitentiary, who died on or about the 12th September, 1900; as well as all documents relating to that matter. Presented 21st April, 1902.—*Mr. Léonard.*
Not printed.

85. Return to an order of the House of Commons, dated 9th April, 1902, for a copy of the report of Inspector McRae of the Indian department relating to the investigation held by him respecting the complaint by the Restigouche Indians against Indian Agent Peters, together with all correspondence and documents in connection therewith. Presented 21st April, 1902.—*Mr. Fowler*.....*Not printed.*

86. Report of the Commissioner for Canada at the Pan-American exhibition. Presented 22nd April, 1902, by *Hon. S. A. Fisher*.....*Not printed.*

87. Report of the Canadian Commissioner at the Glasgow exhibition. Presented 22nd April, 1902, by *Hon. S. A. Fisher*.....*Not printed.*

88. Return to an order of the House of Commons, dated 13th March, 1902, showing:—1. The number of timber limits, and where located, that have been disposed of by the government since July, 1896, in the province of Manitoba and North-west Territories. 2. The names of the purchasers in each case, and price paid for each limit. 3. Copies of tenders for each limit, and names of newspapers in which advertisements appeared. Presented 23rd April, 1902.—*Mr. Roche (Marquette).*
Not printed.

89. Return to an order of the House of Commons, dated 9th April, 1902, for any communications, reports, or other documents received by the government, or any member or department thereof, from Colonel Taylor, of Pittsburg, U.S.A., with reference to the deposits of coal and coal mining in South British Columbia, particularly the Crow's Nest Pass coal fields. Presented 25th April, 1902.—*Mr. Bennett*.....*Not printed.*

90. Return to an order of the House of Commons, dated 9th April, 1902, for copy of petition dated on or about November 29th, 1901, from the president of the Quebec Trades and Labour Council to the department of labour, and of all documents connected with said petition or mentioned therein, or correspondence ensuing therefrom in reference to the arbitration controversy or conflict between the Shoe Workers' Union of Quebec city and Mgr. L. N. Bégin, Archbishop of Quebec. Presented 28th April, 1902.—*Mr. Putzee*.....*Not Printed.*

90*a*. Return to an order of the House of Commons, dated 9th April, 1902, for copies of all letters, telegrams and other correspondence between the department of labour and the officers of the Rossland Miners' Union and other persons, in reference to the alleged violations of the Alien Labour Act in connection with the Rossland miners' strike. Presented 9th May, 1902.—*Mr. Smith (Vancouver)*.....*Not printed.*

91. Return to an address of the House of Commons, dated 14th April, 1902, for copies of all memorials, petitions or protests received respecting the erection of a monument to General Montgomery at Quebec, with dates; also copies of replies sent thereto. Presented 29th April, 1902.—*Mr. Clarke.*
Not printed.

92. Return to an address of the House of Commons, dated 9th April, 1902, for a statement of all moneys paid by the Dominion government to the province of Ontario during the calendar years 1900 and 1901, respectively; stating in each case how much of such moneys so paid was on account of subsidy, allowance for government, and interest, respectively. Also copies of all telegrams, letters, or correspondence of any kind in any way relating to or connected with the transmission of such moneys. Presented 30th April, 1902.—*Mr. Henderson*.....*Not printed.*

CONTENTS OF VOLUME 13—*Continued.*

93. Return to an order of the House of Commons, dated 26th February, 1902, showing (1st) the number of commutations of sentences that have been granted through the department of justice to prisoners convicted of arson or incendiarism during the years 1899, 1900 and 1901, respectively; (2nd) the places where the crimes were committed; (3rd) the sentences imposed. Presented 1st May, 1902.—*Mr. Monk*.....*Not printed*.

94. Return to an address of the Senate, dated 9th April, 1902, for a copy of the orders in council appointing: 1. The Honourable Mr. Wurtele, one of the judges of the court of appeal for the province of Quebec, chairman of the commission for the revision of the statutes of the Dominion of Canada. 2. The Honourable Justice François Langelier, one of the judges of the superior court of the province of Quebec, a judge of the court of appeal of the same province, in the room and place of the said Honourable Judge Wurtele. 3. Cancelling the aforesaid appointments; together with a copy of all correspondence exchanged on the subject of these appointments and the cancellation thereof. Presented (Senate) 2nd May, 1902.—*Hon. Mr. Landry*.....*Not printed*.

95. Return to an order of the House of Commons, dated 14th April, 1902, showing: 1. The number of seine licenses issued for the province of British Columbia for the year 1901. 2. To whom the said licenses were issued. 3. The number operated by those to whom they were issued, and by whom. 4. By whom those were operated which were not used by the parties to whom they were issued. Presented 5th May, 1902.—*Mr. Earle*.....*Not printed*.

96. Return to an address of the House of Commons, dated 19th February, 1902, for a copy of all papers and correspondence exchanged between his excellency the governor general, the Canadian government, or any of its members or departments, the officer commanding the Canadian militia, and the British authorities, in relation to the South African war, its conduct and its settlement; and the sending or recruiting of Canadian troops to South Africa,—for the three last years. Presented 7th May, 1902.—*Mr. Bourassa*.....*Not printed*.

97. Return to an order of the House of Commons, dated 3rd March, 1902, for copies of all contracts made during two years past between the government of Canada and all steamship companies with whom it is agreed that a subsidy, bonus or grant of any kind shall be given by the government of Canada for services to be rendered in connection with transatlantic, transpacific or West Indian business. Presented 9th May, 1902.—*Mr. Smith (Wentworth)*.....*Not printed*.

98. Copy of the finding of the judge of the exchequer court of Canada, in the matter between William Mackenzie and Donald D. Mann, claimants, and His Majesty the King, defendant. Presented 9th May, 1902, by Hon. C. Fitzpatrick.....*Not printed*.

99. Return to an order of the House of Commons, dated 9th April, 1902, showing what licenses, during the year 1900, were issued, entitling the persons named therein to fish for oysters on the beds planted by the government in the harbour of Shediac. And also showing to whom such licenses were issued, and on what dates they were respectively issued, and by whose authority they were issued in each instance, and whether such licenses, or any, and which of them were cancelled; and if so, how many, and on what date, and for what reason, such licenses were cancelled; and what quantity of oysters was secured under such licenses during the period they were in force. Presented 9th May, 1902.—*Mr. Borden (Halifax)*.....*Not printed*.

100. Return to an order of the House of Commons, dated 9th April, 1902, for a statement showing: 1. Into how many classes the employees of the Intercolonial Railway are divided. 2. The name, residence and the salary of each of the employees of the first class. 3. The name, residence and salary of each of those of the second class. 4. The number of those of the third class, and the total amount of the yearly salary paid them. Presented 10th May, 1902.—*Mr. Léonard*.....*Not printed*.

101. Return to an address of the Senate, dated 23rd April, 1902, of all correspondence which has taken place within the last two years between the government of Canada or any department or officer thereof, and any steamship company or agent of such company, engaged in the transportation of the produce of Canada from any port in Canada to Europe, regarding the ventilation of space on steamships used for storage during transportation of perishable products such as apples and cheese; also copies of all clauses in contracts with steamship companies relating to the ventilation of the holds or spaces between the decks of steamers employed as aforesaid; also a statement giving the names of all steamships and the owners thereof which have been equipped with means of generating cold air and distributing the same throughout their holds and between decks, in terms of the appropriation made for such purpose during last session of parliament, giving the cost to the government in the

CONTENTS OF VOLUME 13—*Concluded.*

case of each steamer; also a statement showing the daily minimum and maximum temperatures maintained during each voyage in the holds or between the decks of steamers equipped in terms of the said parliamentary appropriation of last session; also a statement showing the comparative results in the transportation of apples between steamers equipped as above described and steamers without any special means of ventilation; and also a statement giving the names and owners of steamers which it is proposed to equip as aforesaid, for the approaching season, and giving the port of departure from Canada of such steamers as well as of those already equipped as aforesaid. Presented (Senate) 13th May, 1902.—*Hon. Mr. Ferguson* ..... *Not printed.*

102. Return to an order of the House of Commons, dated 15th May, 1902, for copies of all papers relating to preferential trade. Presented 15th May, 1902.—*Mr. Belcourt*..... *Not printed.*

SUMMARY REPORT

OF THE

GEOLOGICAL SURVEY DEPARTMENT

FOR THE CALENDAR YEAR

1901

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1902

[No. 26—1902.] Number 761

To His Excellency the Right Honourable the Earl of Minto, Governor General of Canada, &c., &c., &c.

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to lay before Your Excellency, in compliance with 3 Vic., Chap. 2, Section 6, the Summary Report of the Proceedings of the Geological Survey Department for the year ending December 31, 1901.

Respectfully submitted,

CLIFFORD SIFTON,
Minister of the Interior.

JANUARY, 1902.

SUMMARY REPORT

ON THE

OPERATIONS OF THE GEOLOGICAL SURVEY

FOR THE YEAR 1901.

OTTAWA, January 1, 1902.

The Honourable CLIFFORD SIFTON, M.P.,
Minister of the Interior.

SIR,—Having requested me to take charge of the Geological Survey Department immediately after the lamented death of Dr. G. M. Dawson, which took place on March 2, 1901, it now becomes my duty, under the Act governing the department, to report to you on all matters connected with its administration during the calendar year just closed. I have, accordingly, the honour to submit the following Summary Report on the affairs of the Survey for the above period. This report, besides being what may be termed a short business statement of the work performed by the Survey during the year, contains, in the various subordinate reports, of which it is partly composed, an epitome of the principal scientific results which have been achieved. It embraces the statements of the various officers who were entrusted with the field operations, and also of the gentlemen engaged in carrying on and supervising the several divisions of the indoor work. Nature of report.

Care has been taken to give prominence to any discoveries which may have an economic bearing. This is done in response to the general desire for early information on all points which may be of immediate value to the public, although the scientific discoveries may ultimately prove of greater practical importance. For the above reason some of the accompanying reports on field-work are fuller than usual, although the work they represent may not have been any greater than where the reports are shorter. In the latter case the results will be given at greater length in the detailed annual reports, which are to follow as soon as the field notes can be worked up, and the maps or other illustrations can be prepared. Of such reports, volume XI., containing nine individual sections of this character, with maps, etc., has been pub- Economics.

lished (in cloth covers) during the past summer. Some of these constituent parts had been already issued as "separates."

Published in 1901.

The following are the publications of the department in 1901 :—

Summary report of the Geological Survey for 1900, pp. 203, part A., vol. XIII.

Report on the Topography and Geology of Great Bear Lake and of a chain of lakes and streams, thence to Great Slave Lake, by J. Mackintosh Bell. Part C., vol. XII., pp. 36.

Report on the Atlin Mining District, by T. C. Gwillim. Part B., vol. XII.

Report on the Iron Ore Deposits along the Kingston and Pembroke Railway in Eastern Ontario, by E. D. Ingall. Part I., vol. XII., pp. 91.

Report of the section of Chemistry and Mineralogy, by G. C. Hoffmann. Part R., vol. XII., pp. 64.

Section of Mineral Statistics and Mines, Annual Report for 1899, by E. D. Ingall. Part S., vol. XII., pp. 144.

Report on the Geology of Argenteuil, Ottawa and part of Pontiac Counties, Province of Quebec and of portions of Carleton, Russell and Prescott Counties, Province of Ontario, by R. W. Ells. Part J., vol. XII., pp. 138.

Report on the Geology and Natural Resources of the area included in the map of the City of Ottawa and vicinity, by R. W. Ells. Part G., vol. XII., pp. 77.

Annual Report, vol. XI., new series, 1898, English edition, pp. 853.

Annual Report (new series), vol. X., French edition, pp. 1,117.

Special Reports published in 1901.

Altitudes in the Dominion of Canada, by James White, pp. 266.

Catalogue of the Marine Invertebrata of Eastern Canada, by J. F. Whiteaves, pp. 271.

The maps, sections, profiles, diagrams, etc., published by the Survey during the year are enumerated in the accompanying report by the geographer and chief draftsman of the department.

Field Work.

The great feature of the operations of the department for the year is, of course, the amount of field-work done, as most of the other proceedings of the Survey depend upon this. During the past summer 31 parties were out, as against 13 employed the previous season, and the amount of work accomplished is believed to have far exceeded that of any previous year in the history of the department. The average number of field-parties for the last ten years has been 14 or 15. Besides sending out all the men qualified for field-work belonging to the regular staff, a sort of contract system was adopted, by which the temporary services were secured of a number of competent geologists, principally college professors, who could only devote the summer season to this work. A lump sum was paid for the field-work, together with all maps and reports thereon. While this plan happened to suit these gentlemen, it was also a very economical and advantageous one for the department, since a large amount of field-work was secured at much less cost than by employing officers for the entire year. Under this system, the gentlemen so employed in the field agreed to plot their work and write their reports at their own homes, thus relieving, without cost for rent, heating, &c., our congested offices at headquarters. They send in their map-work from time to time at different stages in its progress for inspection by the Geographer of the department.

31 parties in field.

Contracts.

Advantages.

All the gentlemen who were employed in field-work have given in reports on their labours, and statements covering the year's operations have also been furnished by the Chemist and Mineralogist, the Mining Engineer, the Geographer, the Palæontologist and Zoologist (and his two assistants), the Botanist and Naturalist (and his assistant), the (Honorary) Entomologist and the Librarian.

In former years the Summary Reports of most of the officers of the department were run together under the name of the Director, but in the present volume a distinct heading as to subject is given to the report of each member of the staff and it is published under his own name. In this way the reader may more readily find what he is looking for, and each writer will be more likely to receive the credit due him for his own work.

Individual reports.

As all the more important points in connection with the various operations of the Survey during the year 1901 are set forth in the individual reports, which explain themselves, it will be unnecessary for me to give more than the following convenient summary of the field-work accomplished, the order being from north-west to south-east.

Field officers and their work.

Field officers and their work—*Cont.*

Mr. R. G. McConnell, assisted by Mr. Joseph Keele, worked in the Yukon district. Mr. McConnell's investigations were connected with the mode of occurrence of gold, both alluvial and in veins, and the investigation of new districts as well as those which he had visited in previous years. Mr. Keele was engaged during part of the time on an investigation of the copper deposits of the White Horse district, which were also visited by Mr. McConnell.

Mr. R. W. Brock continued his investigations in British Columbia, in the Boundary Creek district, in West Kootenay, particularly in the neighbourhood of Greenwood and on the north fork of the Kettle river. In addition to tracing out the geographical distribution of the formations, he paid particular attention to the nature of the rocks themselves and to their relations to the ore deposits, and he has written a pretty full report on these subjects.

Dr. Reginald Daly, formerly Instructor in Geographic Geology in Harvard University, became connected with the Survey in May, 1901, and during the past season was employed on the western part of the International Boundary, from the Pacific ocean eastward into the first range of mountains.

Mr. J. M. Macoun acted as Botanist and Zoologist to the Canadian Commission in connection with marking the same boundary.

Mr. W. W. Leach, assisted by Mr. T. Denis, of the Survey staff, was employed in the Crow's Nest Pass coal-fields, in continuation of the work heretofore performed by Mr. James McEvoy, who has left the Service and become connected with a coal mining company operating in the Crow's Nest Pass region. The result of the investigations of Mr. Leach and Mr. McEvoy is to show that there is an enormous aggregate thickness of coal in the main basin in the neighbourhood of Fernie, divided amongst a great number of seams of convenient thickness for working. He also investigated the southern part of the Green Hills coal-fields, lying about thirty miles north of the main field. Here also there is a vast amount of workable coal, which, like that of the main field, is of excellent quality.

Mr. Lawrence Lambe, one of the assistant palæontologists of the Survey, was engaged with a party collecting fossils on the Red Deer river, to the north of Medicine Hat. He brought home a fine collection of the remains of Upper Cretaceous reptiles, and since his return has described two species of tortoises, these descriptions, with illustrations, being included in his report.

Field officers and their work—*Cont.*

Mr. William McInnes continued his surveys between Lakes Superior and Manitoba, in which region he has now mapped out all the more important Huronian belts and described the characters and structure of the rocks which they comprise.

Mr. D. B. Dowling, assisted by Mr. W. H. Boyd, of the Survey, was sent to the country lying to the south-west of Cape Henrietta Maria, on the western side of Hudson Bay. The limits of the different formations within this district had never before been mapped out. The great region lying on this side of the bay is of a generally low and level nature, but behind Cape Henrietta Maria a hilly country was known to exist. On the older geological maps this was represented as Laurentian, but I had predicted that it would more likely turn out to be of Lower Cambrian age and to consist of rocks like those of the Manitonnuck formation on the east side of Hudson bay, which is equivalent to the Animikie of Lake Superior. This prediction was fully confirmed by Mr. Dowling's investigations. The party surveyed the west coast of James bay from Moose Factory north to the above mentioned cape, and they also made an instrumental traverse of the Equan river and a track-survey thence northward by way of Sutton Mill lake to the main bay.

Dr. Alfred W. G. Wilson made a detailed geological survey of the country lying immediately west of Nipigon river and lake, at the same time mapping out all the geographical features which had not been laid down by myself when surveying the lake in 1869.

Dr. W. A. Parks, assistant professor of geology in the University of Toronto, was employed during the summer vacation in making a topographical and geological survey in the country lying to the eastward of Nipigon lake and river. It is expected that the work of these two gentlemen when combined with my own in one sheet, will give a very accurate representation of both the geology and topography of this whole region.

Mr. W. J. Wilson, of the regular staff, assisted by Mr. Thomas Davies, was engaged in defining more accurately the boundaries between the Laurentian and Huronian rocks in the region lying around and to the westward of Abitibi lake and river. His work is shown upon the accompanying preliminary map.

Mr. Frank Johnson did similar work in the country to the east and south-east of the same lake, and his results are also indicated on this map. In both cases topographical surveys were made simultaneously with the geological examinations, and a complete geological map of the whole of the Abitibi country is now being constructed.

Field officers and their work—*Cont.*

The writer spent part of the summer and autumn in geological researches from Kippewa lake to Grand lake and in the region to the northward of the latter, in continuation of surveys and explorations which he had made in that district in previous years. These researches showed the existence of several alternating belts of Huronian and gneissic or granitic rocks.

Dr. Alfred E. Barlow was engaged in the Sudbury nickel and copper district in tracing in greater detail some of the rock-formations in the same area which he had assisted me to investigate in 1887-89 and which are represented on the geological map, published with my report on the district in 1890. One of Dr. Barlow's principal objects was to ascertain whether or not the relative richness in nickel of the pyrrhotite ores was in any way related to the composition or other characters of the different eruptive country-rocks in which they occur.

Prof. Frank D. Adams continued his investigations in the Haliburton district, lying to the north-east of Toronto, where he and Dr. Barlow have now completed a geological survey of a large area of highly interesting rocks belonging mostly to the Upper Laurentian system.

Mr. L. N. Richard was in the field a portion of the season, making some topographical surveys in the western part of the area covered by the Haliburton map, which were required by Dr. Adams in order to enable him to lay down accurately his geological lines in that part of the sheet.

Prof. John Macoun, botanist and naturalist to the Geological Survey, while pursuing investigations in his own Division around the north shore of Lake Erie and the east shore of Lake Huron, also made additions to our knowledge of the surface geology of these regions. He made a special investigation as to the fruit-growing capabilities of the districts examined.

Dr. Robert Chalmers carried out during the summer an extensive reconnaissance survey of the superficial deposits of the interlake peninsula of Ontario, together with some investigations into the results of boring for petroleum, gas, salt and water within the same region. Previous to Dr. Chalmers' work the superficial geology of this region had been more or less investigated for the Survey by myself in the early sixties and later by Dr. J. W. Spencer, Mr. F. B. Taylor, Prof. Gilbert, and others, as amateurs.*

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* Dr. Chalmers' investigations included the country around London, Ontario. After his return in the autumn he was requested by the city engineer and water commissioners of that city to return and give them the benefit of his opinion as to the best means of securing a large and reliable supply of good water. He acceded to this invitation and his advice will, no doubt, prove of value.

Field officers and their work—*Cont.*

Dr. Henry M. Ami was instructed to perform in the province of Quebec, westward of the city of the same name, and in part of the Ottawa valley, work similar to that assigned to Dr. Chalmers in Ontario.

Mr. E. D. Ingall, mining engineer to the Survey, in addition to his usual duties in connection with mines and mineral statistics, completed his report on the iron ores of Eastern Ontario and Western Quebec, and it has lately been printed for the department. He also visited some of the iron mines in these districts.

Dr. R. W. Ells was again engaged in a geological survey of the district around Kingston and thence east and west, and has collected sufficient data to map out the boundaries of the various palæozoic formations in that part of the country.

Principal J. A. Dresser, of St. Francis College, Richmond, P.Q., was engaged during his vacation in making a petrographic study of Brome mountain, east of Montreal. In previous summers Principal Dresser had made similar studies of some of the other isolated intrusive masses in the province of Quebec, and these, together with the studies of Mr. LeRoy and Professors Harrington and Adams, complete our knowledge of the lithological character of all the isolated mountains in the remarkable chain extending from Rigaud on the west to Brome on the east.

Prof. A. Osann, of Mülhausen, Germany, has completed a highly interesting report on his petrographic studies, both in the field and laboratory, in regard to a variety of crystalline rocks occurring east, west and north of Ottawa city. This report, which is well illustrated, is now in press.

Prof. Laflamme, of Laval University, carried out a further geological examination of the Island of Anticosti, in the mouth of the St. Lawrence, on behalf of the Geological Survey. In doing this he has added considerably to our general and geological knowledge of this large island, and has brought home a collection of the fine fossils which occur there in the Middle Silurian rocks.

Prof. L. W. Bailey, of the University of New Brunswick, made further researches, on behalf of the Survey, into the geology of southern New Brunswick, and also did some work on the Carboniferous of the northern part of the province.

Prof. H. S. Poole, of Dalhousie University, Halifax, was requested to investigate the whole coal problem in New Brunswick, with a special view to determining whether or not workable coal seams might

Field officers and their work—*Cont.*

be found by boring in any part of the wide distribution of the Carboniferous rocks in the north-eastern part of the province. In performing this work Mr. Poole was assisted for a part of the time by Dr. L. W. Bailey.

Mr. Lawrence W. Watson, of Charlottetown, P.E.I., undertook certain scientific researches in the Province of Prince Edward Island, in which but little official geological work had heretofore been done. The results of Mr. Watson's investigations promise to lead to interesting results in some of the lines he took up.

Dr. George F. Matthew continued field-work in connection with his palæontological studies in Cape Breton. He is preparing a general report (which will be illustrated) as to the palæontological results of several years work in the lower provinces.

Mr. E. R. Faribault, who has made geological surveys of most of the gold mining districts in Nova Scotia, continued his investigations in this direction during the whole season. Mr. Faribault has now been enabled to demonstrate the true history and origin of the gold-bearing veins of these districts.

Mr. C. O. Senecal was engaged part of the season in Nova Scotia in running base lines with a view to connecting the gold district plans prepared by Mr. Faribault, and also to securing accuracy of position as to certain geological work heretofore done by the Survey in Nova Scotia.

Mr. Hugh Fletcher continued the work in Nova Scotia in which he has been engaged during the last thirty years. He has now nearly completed his geological survey of the coal-fields and was more particularly occupied this summer in Cumberland County. Mr. Fletcher has finished ten map-sheets, showing details of the geology, especially in the north-eastern half of Nova Scotia, as the result of his labours during the latter part of the above period. These have been engraved and it is expected they will be published during the present winter.

Mr. C. W. Willimott was in the field all summer, engaged in collecting supplies of minerals and rocks to be used in meeting the demand from educational institutions for specimens for illustration in teaching mineralogy and geology. The collections of good specimens which are sent by the Survey, under certain conditions, to universities, collegiate institutes, academies and schools, all over the Dominion, constitute a very important adjunct in the teaching of mineralogy. Mr. Willimott, who has had much experience in collecting and knows the best localities to go to for the minerals required, worked in the provinces of Ontario, Quebec, New Brunswick and Nova Scotia. He sent in a large supply

of good material for the above purpose and also many fine specimens suitable for exhibition in our own museum. The results of his labours are given more fully in Dr. Hoffmann's report. We are indebted to several managers and owners of mines, quarries, &c., for sending us generous quantities of material, thus saving Mr. Willimott the necessity of going himself for it. Field officers and their work—*Cont.*

Mr. R. L. Broadbent made some trips to the field for the purpose of obtaining mineral specimens required for the museum as well as for the educational collections. His work is also referred to in Dr. Hoffmann's report.

We are indebted to Mr. Henry O'Sullivan, P.L.S., of Quebec for tracings of his surveys on the southern and eastern shores of James bay; and we expect to receive a good deal of interesting geographical and geological information from several persons not connected with the department who have been travelling in some of the northern parts of the Dominion. Some of the former members of the staff have also kindly promised to contribute their geological observations over wide areas which will always help to fill in the geological map. Among these are Mr. J. B. Tyrrell of Dawson, Mr. A. P. Low and Mr. J. Mackintosh Bell. Outside aid.

Mr. A. P. Low resigned from the Survey early in 1901 in order to accept a position offered him by a syndicate of United States capitalists. He proceeded to the eastern coast of the Hudson bay, in order, amongst other things, to locate mining claims on the extensive manganiferous iron deposits which were discovered by me on the Nastapoka islands, in that region, in 1877 and described in my report of the same year. Before leaving, Mr. Low promised to try to send to the Survey reports and maps showing the geological information which he might incidentally acquire in connection with his present work. Mr. A. P. Low.

Mr. J. Mackintosh Bell, who had accompanied me, as assistant, to Great Slave lake in 1899 remained at that lake during the following winter in order to proceed on an exploration of Great Bear lake and the surrounding country the next summer. Returning in the end of 1900, he completed a map and report of his work for the Survey, after which he accepted a position as explorer and geologist, offered by Mr. F. H. Clergue of Sault Ste. Marie. He worked, aided by two assistants whom he detached separately from his own party, between Lake Superior and the east side of James bay. It is expected that Mr. Clergue will ultimately give the Survey the benefit of Mr. Bell's purely geological results in the above region. Mr. J. M. Bell.

Primary object of the Survey.

The primary object for which the Geological Survey was instituted and for which it is being carried on is to aid in the development of the mineral resources of Canada, and the constant aim of those engaged in its work is to carry out this object in the best possible way and by methods approved by intelligent men who have a knowledge of how the end in view can be best attained. This is not by an indiscriminate search for individual "mines" without regard to the nature of the rocks, but by scientific and systematic methods based on knowledge and experience gathered by educated men all over the world.

Distribution of formations.

Among the first things which a geological survey requires to do, is to trace out the geographical distribution of the various rock formations, some of which carry economic minerals, while others do not. It is important to point out where such minerals are not to be found as well as where they may be looked for with success. In the case of metals and their ores, the conditions and modes of occurrence are studied by our field geologists, so that the efforts of the prospector may be properly directed and his attention confined to the most promising parts. A study of the conditions of occurrence of any ore which may be found in a particular formation will enable us to judge intelligently as to the probability of the discovery of such ore in workable quantity or otherwise.

Non-metallic minerals.

In the case of economic minerals of a non-metallic character, such as coal, petroleum, salt, fire-clay, etc., a knowledge of the structure, composition, geological age and other matters in regard to a rock formation may enable the geologist to pronounce upon the probable occurrence of such minerals, their depth from the surface at any given point, or as to any other circumstance in connection with them, with an accuracy which would be impossible to a person who had not this geological knowledge. The information obtained by the joint labours of large numbers of geologists during a long period and in all parts of the world, has been brought together by a free interchange of knowledge in a scientific spirit. It has become the common property of all and may be utilized by anyone who has been trained to understand such subjects. The above two examples of the utility of a geological survey are given, out of many that might be cited. But surely in this enlightened age, it should not be necessary to defend the valne of scientific knowledge and experience in connection with such investigations as are entrusted to the Geological Survey. I wish, however, to call attention to the eminently practical character of all the branches of work carried on by the department.

Practical character of the Survey's work.

As the nature of the various operations of the Survey above referred to, seems to be imperfectly understood by many, a few words of expla-

nation may not be out of place. These operations may be divided into field and home work. The former consists in obtaining original information in various parts of the country, collecting specimens for further examination, etc. This work is done almost entirely in the open season. The elaboration of this information is carried on mostly at headquarters in the winter by the same men, with help from the draughtsmen, chemists, lithologists, palæontologists, or other members of the indoor staff.

Topographical surveying.

Much of our work being prosecuted in unsurveyed and even unexplored territory, topographical surveying becomes a prominent part of onr duty. It would, of course, be of little use for our officers to do geological work in previously unexplored districts, if, on their return, they could not represent it in its proper geographical position. Each field man, therefore, requires to be a topographical surveyor, as well as a geologist. It will thus be seen that the qualifications of a field geologist in Canada must be of a much wider and more varied character than would be required in an older country, where the topography is already well represented on the maps. Our geographical work embraces surveying of all kinds, from accurate measurements of base lines to track surveys and mere explorations. It includes triangulation of lakes, sea coasts and mountainous regions, surveys on land by transit and chain, odometer, pacing, etc.; on water by micrometer telescopes, boat logs and time reckoning. Observations for latitude and longitude require to be made at frequent intervals, especially in the more distant regions. Altitudes should be taken everywhere, either by barometer or spirit level. When working on the water, soundings are made as often as possible. Sooner or later all such facts prove valuable, and they can be noted by an energetic man in connection with working out the geology. In order to be able to carry on work in the wild or uninhabited parts of the country, the geologist requires to understand the selecting of suitable men for the work, the equipment and management of a party under varying conditions, far from civilization, methods of travel, of finding food in wild regions, etc. Unforeseen difficulties often arise which require patience, skill and endurance to overcome. The geologist in charge of a party in remote regions must, therefore, be a man of energy, resources and experience.

Various kinds of surveys.

Geologists qualifications.

Geology being the prime object of these surveys and explorations, the man in charge of one of our parties requires, in addition to the topography, to attend constantly to recording a variety of observations as to the nature of the rocks, their distribution, dip or strike, the run of veins, joint and cleavage planes, dykes, etc., glaciation or

other surface conditions, the superficial deposits, etc ; he requires also to collect and label specimens of rocks, minerals and fossils. Particular attention is directed to the occurrence of useful minerals and rocks of any kind in new districts and to the examination of any discoveries, and to workings by prospectors and miners, with a view to his forming a correct estimate of the outlook for mining or quarrying in such districts.

Useful minerals.

Variety of observations.

While working in new territory we also take advantage of the opportunity to obtain heights of banks or cliffs, hills and mountains and comparative levels of waters, grades and depths of streams and lakes, records of the temperature of the air and water and of other meterological observations as indications of climate, notes as to the kinds and characters of the forest trees and on the flora generally ; also as to the fauna, the collection of zoological and botanical specimens, making notes on the nature of the surface of the country, whether hilly or level, rocky, swampy or covered with soil, the character of the land, and on various other matters. We also enquire from the natives as to the topography, etc., of regions beyond our own explorations. Photographs are taken to illustrate the geology, scenery, the character of streams, etc. All these duties being carried on by the same person, in addition to his general management of the party and pushing on of the work, require constant attention and labour and they often involve danger and privation, as well as discomfort from the weather, the plague of mosquitoes and various other insects, and are unaccompanied by any of the comforts and advantages enjoyed in civilized parts.

Work at headquarters.

Among the numerous and varied branches of work prosecuted by the staff at headquarters is map-drawing in all its departments, supervision of map-engraving, the preparation of reports giving the results of the different kinds of work being done, looking after the printing and illustration of these reports, testing, assaying and analysing ores, rocks, coals, clays, sands, waters and mineral substances generally, the business of the Section of mines and mineral statistics, petrographic work, preservation, determination, description and utilization of the fossils collected and the illustration and publication of the results of palæontological research, lapidary work, the preservation, determination and mounting of zoological specimens, studies in connection with the fauna of our vast conntry, including entomology, the mounting, naming, cataloging, classification and the description of new species and varieties of the plants collected, the study of the economic results of botanic researches in the field, the supplying of good named and catalogued collections of specimens of minerals and rocks to edu-

cational institutions of various grades, from elementary schools to universities, after we have collected these from widely separated parts of the Dominion, work connected with the archæological collections, with the accountants' branch, with the care and increase of the library, the sale and distribution of the maps, reports and other publications of the Survey, the care of the different departments of the museum, the varied duties of the secretary, photographic work, attending to daily personal enquiries on a great range of subjects, and the correspondence connected with every branch of the service.

Subject of correspondence.

The correspondence of the office covers a wide range of topics of the most varied character, embracing enquiries on almost every subject connected with geology, geography, mapping, rocks, ores, minerals and materials of all sorts, mines, mining, markets and statistics of mineral products, chemistry, metallurgical questions, forests and timber, flora, fruit-culture, fauna, protection of game and fish, hunting, fishing and travelling in wild parts of the country, engineering, surveying, exploring, characters of wild and settled regions, sub-division of land, health resorts, information for proposed visitors and immigrants, climate, mineral statistics, the naming of specimens and of whole collections, questions in geology, palæontology, biology and nearly all the natural sciences, as to aboriginies, surveys and instruments, values and uses of economic minerals, as to text-books, requests for information on a great variety of scientific subjects. Many of the letters refer to matters altogether foreign to any branch of our work. One of the more numerous classes of letters is that asking for our reports, maps and other publications, which now number 657 titles, of which 607 are enumerated in the last List of Publications of the Survey, which is sent free to applicants. A nominal charge is made for these publications to prevent an indiscriminate demand from persons having no real need of them. The above example will serve to illustrate the main features of the correspondence carried on. The letters and enquiries received relate to almost every scientific subject except electricity. Some of the demands are far-reaching and elaborate, and require voluminous answers, the preparation of which consumes the time of the higher officers of the Survey. In fact, the department seems to be considered a bureau of free information on all subjects such as those which have been mentioned. All letters are answered promptly; and we are frequently thanked by the correspondents for the pains we have taken to satisfy them.

Good results.

The supplying of all this information, both by letter and to personal applicants, as well as the numerous other services rendered in the various ways above indicated, must be of great assistance to the appli-

cants, and it constitutes an important means of promoting the progress of the country. Having the necessary information on the above subjects, together with the extensive personal knowledge of the remoter parts of the Dominion, possessed by various members of the staff enables the Survey to give valuable and reliable information to inquirers both at home and abroad on almost any subject relating to Canada.

Maps.

Maps collected.

The value of accurate maps in connection with the delineation of geological formations was fully appreciated by the late William Logan from the beginning of the Survey and was dwelt upon by him in the earlier reports. He collected assiduously all charts and maps, whether printed or in manuscript, relating to Canada and secured any desirable collections which could be obtained by purchase. In this way large numbers of maps were acquired from surveyors and others which it would be impossible to obtain at the present day. Copies were made of all serviceable maps and plans in the Crown Lands Offices of both Upper and Lower Canada and the surveys which were carried on for geological purposes were often the means of making important corrections in these.

Plans preserved.

Later on in the progress of the country, when explorations and surveys were being made for railways, boundary lines, lumbering operations and other purposes, tracings of the resulting maps and plans were secured as soon as possible. It was in this way that copies of a large proportion of the plans of the government survey of the Canadian Pacific Railway were preserved at the time the offices of this survey were burnt and the originals destroyed at Ottawa in 1872.

Topography of Canada.

But above all, the extensive surveys and explorations which have been made by the geological staff itself, year after year, throughout the comparatively long period during which its operations have been carried on, have been the means of mapping out the principal part of what is known of the topography of Canada. The maps, plans and charts in our collection, not counting those of small areas, now number about 20,000. It is safe to say this is the largest and most valuable collection of such documents in the Dominion, and it constitutes the most precious part of the property of the department. The Survey is now in the sixtieth year of its existence and the necessary topographical surveys, incidental to the geological investigations, are being prosecuted more vigorously than ever and over a much wider range than in the earlier years, when only two provinces claimed attention, instead of half a continent.

It may be said that the Geological Survey is the only distinctly topographical branch of the public service and that the large number of maps which it has produced from time to time have always been recognized as the most accurate obtainable in regard to topography, to say nothing of their primary object—the geology which they represent. Our published maps already number about 350, while considerable additions are in various stages of preparation, and we have on hand the data for the construction of many more. The cost of producing these maps, from the original survey by the officers of the staff, the drafting, compiling, etc., up to the finished engraving, has been extremely small in comparison with their utility and value to the country. An immense amount of work has still to be done before the remainder of even the habitable parts of the Dominion are mapped out, but with the increased facilities now at the disposal of the department, this work can be prosecuted even more rapidly and economically than before.

Accuracy maps.

Small cost.

The process of carrying on a geological survey of such a vast, and for the most part, unsurveyed country as Canada, must necessarily be entirely different from the methods employed in well surveyed and comparatively small countries. The geology of Canada has been already outlined with more or less completeness in the older parts of the country, that is, in regions where the lands have been divided up and settled, although even here, much remains to be done in some districts, but in the greater part of the area of the Dominion the need of surveys for other than geological purposes has not been sufficiently pressing to justify the great expenditure which would be required to make topographical or cadastral surveys far in advance of immediate requirements.

Methods differ.

It has, therefore, remained for the Geological Survey to do its topographical work simultaneously with the geological, and thus the country has had the benefit of both at a remarkably small cost. The Survey has thus been a most useful institution for the general progress of the country, and as no better method could be employed, the same topographical system must continue if we are to have the whole country mapped out at all, and as the geological work adds little or nothing to the cost, we might as well have it done at the same time.

Simultaneous work.

The long experience of sixty years which the Survey has had in carrying on these combined surveys in all parts of British North America, from Nova Scotia to the Yukon and Lower McKenzie, and from Vancouver Island to Baffinland, has developed a very efficient system for the execution of this work, both as regards accuracy and rapidity on the one hand, and economy of expenditure on the other.

Sixty years' experience.

The methods pursued, and the results obtained, have always met with the highest approval from all impartial persons capable of judging.

Whether the particular survey to be made be one requiring instrumental aceuracy, or one of those carried on by rougher methods in previously unexplored regions, where long distances or large areas are covered in a short time, the officer in charge of the party and his professional assistant work together at both the topography and the geology.

Map-making.

On returning to winter headquarters, the plotting and preliminary work on the map are done, mostly by the assistant, but partly by both, with perhaps the assistance of a draughtsman, and the compilation of the map, on the scale adopted for publication, is proceeded with and carried to completion under the supervision of both the geographer and the geologist or his assistant. When the compilation is sufficiently advanced, the geologist writes his report, which he could not do without the map. All the geologists being engaged in a similar way, a number of valuable original maps, combining topography and geology, are wholly or partly constructed every winter, and the field geologists and their assistants are ready to go back again to the outdoor work as soon as the season comes round. During summer, when the geologists are away in the field, the geographer and his assistants, being relieved of much of the work of compilation, can devote more time to the drawing for the engraver of such maps as have been completed, correcting proofs of new maps, and otherwise facilitating their final production.

United work necessary.

It will thus be seen that the topographical and geological map-work must necessarily be done in the same office. The geologist must confer constantly with his assistant and both with the geographer and chief draughtsman in order to produce the best possible map from the materials obtained in the field, and he must lay down the geology at the same time as the topography. The presence of a number of geologists and topographers under the same roof is mutually beneficial and promotes an *esprit de corps*. The men take a pride and an interest in their work, and they regard the professional credit which it may bring them, if well done, as of more importance than the pecuniary remuneration they receive.

Control of map-work.

Under the existing system, which was inaugurated nearly sixty years ago by the late Sir William Logan, the department has, so far, secured the services of a superior class of scientific men, who would not give up their time and talents unless they obtained full credit for all branches of this work. Geological surveys in all countries control the issue of their own maps. The mapping of the topographical and geological work of the gentlemen only temporarily connected with the

department, which has been already referred to, could only be done under the immediate control of the Survey, and it works in well with our organization, which includes a number of skilled draughtsmen who do no field-work themselves.

A system of map-making differing from the above was tried for a time with less success in the Geological Survey office. It consisted in attempting to construct the map from the field data, independent of the geologists and assistants who had done the field-work. But this method has been abandoned as unsuited to our requirements. The present system, which is conservative of both time and energy, has been evolved in all its details after a very long experience in the various branches of the work, and it has proved to be the best that can be followed.

Unsuitable system abandoned.

The department aims at the systematic division and arrangement of the work. The geologist must have constant access to all maps which may refer to the region he is working upon. Our maps, being constructed from surveys under our own control, with the addition sometimes of other reliable data, are always up-to-date and contain the newest and most accurate information. These maps, together with the Summary and Annual reports, are given to the public at the earliest possible moment, but a certain amount of time is, of course, required for the drawing and engraving of good maps. From the fact that they show both the geology and the topography as accurately as they are known, our maps have come to be regarded as the best guides for travellers and prospectors, especially in new regions, and they constitute a distinct advance in the proper mapping of the country.

Early issue of geological maps.

Since the department requires to construct the best possible maps in order to lay down its geological work on various scales, and as it already possesses the largest and richest collection of maps extant, referring to all parts of the Dominion, and which have been obtained largely by its own labours, its base-maps of the whole country or of any portion thereof, on such scales as may be required, could be utilized both on account of their accuracy and for the sake of economy, as well as to save duplication, in the future production of reliable maps for the special purposes of any of the other departments.

Other uses.

The first large general geological map of Canada was published in 1866. In order to show the relations of the geological formations of Canada to those of the United States, it includes a large part of that country and extends from Newfoundland westward to the Qu'Appelle river, in what is now the province of Manitoba. It is on a scale of 25 miles to an inch and is very finely engraved on steel. The next

General geological maps.

general map issued, shows, in a less detailed manner, the geology of the Dominion from the Atlantic to the Pacific, but it extends north only to Newfoundland in the east and Great Slave lake in the west. It is on a scale of 43 miles to an inch and was produced by lithography.

New geological map of the Dominion.

A map on a scale of 50 miles to an inch, to show the geology of the Dominion, as far as known up to 1902, is now in the engraver's hands, and it is expected that the western half of it will be ready for distribution the present winter. It is done on stone and shows the country as far north as Hudson Strait on the east and Great Bear lake on the west.

ANALYSES, ASSAYS AND EXAMINATIONS OF MINERALS.

Chemical laboratory work.

The report of the Chief Chemist and Mineralogist for the year just closed, in regard to the work of his Division, shows the great importance of this branch of the Survey. Dr. Hoffmann and his two assistants have been engaged principally in the examination, assay or analysis of the specimens received from the field geologists. Some of these were of geological and some of economic interest. They embraced mineral fuels of all kinds, ores of iron, copper, lead, nickel, silver, gold and other metals, mineral waters, rocks required for various purposes, graphite, clays, marls, shales, sands, ochres, etc., and of many of the rarer species of minerals. But in addition to this work, these gentlemen examined during the year 705 samples of minerals which were brought by visitors to the museum or sent by express or through the mails by miners, prospectors, explorers and others from all parts of the Dominion for identification or information regarding them. Dr. Hoffmann furnished a written report on most of these examinations or analyses. During the past twelve years the numbers of specimens thus examined, identified, described or reported upon, as given in the Summary Reports were as follow :

Samples sent and analysed, etc.

Year.	Specimens.
1890	558
1891	705
1892	697
1893	463
1894	694
1895	573
1896	697
1897	985
1898	861
1899	1,017
1900	663
1901	705

For 12 years, 8,618, or at the average rate of 718 a year. The rules of the department require that the locality of occurrence of all specimens be given before they can be examined or analysed in the laboratory.

The minerals for which information was sought during the year, either by personal application or by correspondence, included the following :— Minerals inquired about.

Albertite, asbestus, barytes, borax, cement, clays, celestite, chromic iron, coal, copper ores, corundum, fire clay, fuller's earth, gas (natural), gold, graphite, granite, gypsum, infusorial earth, iron ores, kaolin, lepidolite, limestone, magnesite, manganese, marble, marl (shell), mica, mineral waters, molybdenite, nickel, ochres, peat, platinum, pyrite, salt, selenite, silver, soapstone, sulphur, talc, tugsten, zinc ores.

In connection with these inquiries, the Survey has been the means of putting parties requiring these minerals, etc., in communication with the producers or owners of properties where they occur, thus promoting the development of various resources and increasing the business of the country. Service thus rendered.

The value of the mineral output of the Dominion is increasing very rapidly. In 1900 it amounted to $64,448,037, while in 1886 it scarcely exceeded $10,000,000. The figures for 1901 are not yet available, but there has been a further increase under most heads, and the working of mines and utilization of the various mineral resources of the country are rapidly taking a foremost place in the great industries of Canada. Value of mineral output.

COAL-BEARING LANDS OF THE CROW'S NEST PASS REGION.

According to the provisions of Chapter 5, 60 and 61 Victoria, 1897, the Director of the Geological Survey is required to state in writing his opinion as to what are coal-bearing lands within the areas which were granted by the government of British Columbia to the British Columbia Southern Railway Company, its successors and assigns for ever, as subsidy earned by the Canadian Pacific Railway Company under an agreement with the former company and the Dominion of Canada in the construction of the Crow's Nest Pass Railway. On the 15th of October I was requested by the Minister of the Interior to report, according to the requirements of the above mentioned Act, and my return, illustrated by a geological map, was furnished on the 17th of the month. Coal lands of Crow's Nest Pass.

Surveys of coal field.

In 1900, by direction of the government, a topographical survey of the region was made by Mr. H. O. Wheeler, and a geological survey of it was also made the same year by Mr. James McEvoy, assisted by Mr. Joseph Keele. The latter survey was continued in 1901 by Mr. W. W. Leach, assisted by Mr. T. Denis, and by the month of October we were able to define the coal-bearing lands with sufficient accuracy. These lands consist of two separate areas, the more southern and larger one containing about 230 square miles, or 147,200 acres, and the smaller one, which lies in the Green Hills, at a distance of nearly 30 miles north of the other, containing about 6·75 square miles, or 4,320 acres. There had been rumours of the occurrence of coal elsewhere within the lands belonging to the Canadian Pacific Railway Company, but on investigation by Mr. Leach these were not confirmed.

Immense quantities of coal.

Mr. McEvoy reported that in a total section of 4,736 feet, at right angles to the strata, which he measured in the main, or Crow's Nest Pass Coal Field, there are no fewer than twenty-two seams of coal, with the enormous aggregate thickness of 216 feet, of which, at least, 100 feet may be considered as workable coal. This section was measured at Morrissey siding, and it is all above the level of Elk river. The Canadian Pacific Railway Company has had two borings made near their track, south-east of Michel station. The logs of these borings have been kindly furnished to this department. They both show the existence of numerous seams of coal, and these have been correlated, by Mr. Leach, with those of the section measured by Mr. McEvoy at Morrissey siding. Their relations to one another are described in Mr. Leach's report in this volume and illustrated by the sections which accompany it.

Green hills coal-field.

In the portion of the Green Hills coal-field within the railway company's grant, Messrs. Leach and Denis measured a section of coal-bearing strata of 3,387 feet, containing twelve seams of coal, having a total thickness of eighty-nine feet. Seven of these seams are of workable size, with an aggregate thickness of seventy-nine feet. The section is not complete, as the rocks are covered up or concealed in many places, leaving room for the occurrence of more seams of coal. The sections in Mr. Leach's report, drawn to a scale, show the position, thickness, etc., of each seam in both of the above coal-fields.

GEOLOGICAL MAPS OF NOVA SCOTIA.

Geological maps of Nova Scotia.

The publication of ten geological map-sheets of the north-eastern portion of the mainland of Nova Scotia, prepared in great detail by Mr. Hugh Fletcher of this department, from his painstaking topo-

graphical and geological surveys, extending through a period of more than twenty years, was suspended, owing to a difference of opinion, which had been held by some, as to the age of certain geological formations of that part of the province. As Mr. Fletcher's conclusions on this subject have not changed since the publication by the Survey of his previous geological maps in accordance with these views, and as he has given his unremitting study and labour to the correct elucidation and representation of the geology of the region in question, having no object but the truth to maintain, it is not considered desirable to longer withhold from the public these valuable maps, and they will accordingly be published as rapidly as possible. They are already engraved and the colour-stones are being prepared, so that it is expected the printing can be done during the present winter.

MINERALS OF CANADA AT INDUSTRIAL EXHIBITIONS.

Canadian minerals at exhibitions.

Through the efforts of the Geological Survey, the minerals of Canada have been well represented at all the international industrial exhibitions which have been held, from that of 1855 in London to those of last year. These collections and the descriptive catalogues prepared by the Survey to accompany them, have never been excelled by those of any other country. The fine collection which had been got together under the control of the Survey for the Paris exhibition of 1900 was transferred entirely to that held in Glasgow in 1901, and in both cities it served to make known, in a striking manner, the great mineral wealth of Canada.

Zoological specimens exhibited.

At the request of Mr. Wm Hutchison, the Canadian Commissioner to the Pan-American Exhibition, held in Buffalo last year, the department loaned some zoological specimens, including a fine wood buffalo. These specimens were the means of attracting much attention to the country, and, owing to Mr. Hutchison's careful management, they have been safely returned to the museum.

The collections which were at the Paris and Glasgow exhibitions, are to be shown during the winter in London, and in spring are to be divided between the exhibitions to be held in Cork and Wolverhampton respectively.

ZOOLOGY, BOTANY, PALÆONTOLOGY, ETHNOLOGY, ETC.

Other scientific work.

Dr. Whiteaves' catalogue of the Marine Invertebrata of Eastern Canada, published during the year, is the result of the studies of an

Scientific works.

expert for many years and is a very important contribution to zoological literature. Other work which he has accomplished last year is mentioned in his own report. It will be seen by this report that a considerable number of zoological specimens have been added to the museum. Professor Macoun's botanical work in Ontario, which is described in his report, shows that he made very large collections of plants and a variety of interesting zoological observations in the southern part of the province. He is now engaged in preparing for the press the second part of his *Birds of Canada*. Mr. James Macoun and his assistant did good work with the International Boundary Commission in collecting botanical and zoological specimens and in working out the natural history of the south-west corner of the Dominion bordering on the Pacific ocean. Mr. Lawrence W. Watson has been working on the botany and zoology of Prince Edward Island and has sent some interesting specimens to the museum.

In addition to the palæontological work performed by our own staff, we are greatly indebted to Professor Samuel H. Scudder, of Harvard University, for another valuable voluntary contribution to Canadian palæontology, being part 2 of vol. II. of his *Canadian Fossil Insects*, containing 92 pages and 10 plates, published by the Survey during the year. The figures were drawn by Dr. A. D. Hopkins, of Morgantown, West Virginia. Professor Penhallow, of McGill University, has written and illustrated a report on Osmundites from Queen Charlotte island, which will be published as soon as possible. Several

Totem poles.

additions have been made to the archæological and ethnological collections, among the latter being a carved totem pole about 40 feet high, obtained for the department in British Columbia by Dr. C. F. Newcombe. This and four other totem poles from the Pacific coast, which we had on hand, have been erected in the court-yard of the museum.

VOYAGEUR WHO WAS LOST IN THE FAR NORTH.

In connection with the survey of Great Bear lake, it was mentioned in the Summary Report for 1900, that one of Mr. J. M. Bell's men

Return of lost voyageur.

(Charles Bunn) had been lost near the Arctic sea. Mr. Bell and all his party did their best to obtain some trace of the missing man, but without success. They spent a number of days searching for him on the Barren Lands between the north-east angle of Great Bear lake and the Coppermine river, not far from Coronation gulf, when time was very precious, as too little of the season remained for their own return before the setting in of winter. After the party had been obliged to give up the search, Mr. Bunn fortunately wandered to a

camp of Indians on Great Bear lake. These people treated him hospitably and helped him to reach Fort Norman on the McKenzie river. From this post he accompanied parties of Hudson's Bay Company's men to Fort Simpson and thence to Fort Resolution where Mr. Bell had engaged him. He pushed on southward up the Great Slave and Athabasca rivers and finally arrived safely at Edmonton, where he was paid by this department for all his time and expenses.

OFFICERS' REPORTS.

The Yukon District.

Mr. R. G. McConnell.

Yukon district.

During the past season the writer, assisted by Mr. Joseph Keele, who acted as topographer and geological assistant, was occupied principally in an examination of some of the smaller placer camps in the Yukon Territory. I left Ottawa on June 16, joined Mr. Keele, who had preceded me a few days, at White Horse on June 26, and after outfitting there, we proceeded at once to the Salmon river gold-field. The party consisted, besides Mr. Keele and myself, of two camp hands, who were engaged at Sault Ste. Marie.

Salmon river Gold-field.

Salmon river gold-field.

The Salmon river gold-field is situated east of the South fork of the Big Salmon river. It can be reached by ascending the Big Salmon river to the South fork, a distance of about forty miles, and then continuing up the latter to the mouth of Livingstone creek, a further distance of about twenty-five miles. These streams are, however, swift and difficult to ascend, and the route generally adopted is to descend the Lewes to the mouth of the Teslin, and ascend the latter to Mason's Landing, a distance of about twenty miles. From Mason's Landing, a pack trail, fifteen miles in length, has been constructed across the ridge bounding the Teslin valley on the east, to the valley of the south fork of the Salmon, and branch trails continue on to the various creeks. The trail follows a wide depression in the ridge mentioned above, at the summit of which it reaches an elevation of about 1,700 feet above the Teslin valley. A wagon road, following nearly the same course across the ridge, could easily be constructed and would be a great boon to the district.

Topography.

Topography.

The topography of the district is simple. A ridge about five miles in width where crossed by the trail, separates the Teslin river at this point from the valley of the South fork of the Salmon. The ridge is traversed by several deep depressions and is fairly regular in outline as a rule, but in places is surrounded by rocky peaks, some of which attain an elevation of 5,000 feet.

South fork.

East of the Teslin ridge is the great valley of the South fork of the Salmon, a huge depression some thousands of feet in depth, and where crossed by the trail, nearly two miles in width. The valley-bottom consists of a wide, partly forested gravel plain, broken in places by low benches and terraced along the sides up to an elevation of about 500 feet. The South fork itself is a shallow stream, seldom exceeding thirty yards in width, flowing rapidly along a boulder-paved channel. It rises in a range of granite mountains to the south and has a length, measured along the valley, of about sixty miles. Its grade at the mouth of Livingstone creek averages forty-five feet to the mile.

East of South fork.

The valley of the South fork is bordered on the east by a steep slope, about 2,000 feet in height, beyond which is a strip of plateau-like country, four to five miles in width, surmounted by low rounded hills, the summits of which have an elevation of from 2,000 feet to 2,500 feet above the valley. The plateau-strip is terminated on the east by a high mountainous district, worn into sharp peaks and bold projections, on some of which the snow lies throughout the season. The plateau-strip bordering the valley constitutes the gold-field of the district. The larger creeks cut back through it into the high mountain region beyond; the smaller ones rise in the lower foreground and descend rapidly, often in a series of cascades, to the level of the valley of the South fork.

Timber.

The valleys and the slopes of the plateau, up to a height of about 2,000 feet above the valley of the South fork, are partially forested. The principal trees noted were the Banksian pine, the white and black spruces, the aspen, the rough-barked poplar, the balsam fir and a species of birch. The trees, as a rule, are small and the quantity of serviceable timber in the immediate vicinity is limited. A few groves of white spruce were noted, some individuals of which attained a diameter of fully eighteen inches, but trees of this size are rare.

Geology.

The geology of the district can only be briefly referred to here as the rocks have not been studied. The oldest beds in the district

SKETCH MAP
of
SALMON RIVER GOLD FIELD
YUKON TERRITORY

To accompany Summary Report by
R.G.McCONNELL B.A.
1901

Discovery Points on various Creeks marked thus:
Contour interval 100 ft

Mendocino Creek
Little Violet Creek
Cottonwood Creek
St. Germain Creek
Lake Creek
Cascade
Summit Creek
Trail
Cascade
Livingstone Creek
Carlton
Marlon Creek
Sylvia Creek
Bridge
SOUTH FORK of BIG SALMON RIVER
Flat Creek
Moose Creek
SW M.P.
Var. 33½ E.
Astronomical Meridian
Magnetic Meridian
Trail to Mason Landing on Teslin
14 miles from South Fork

Quartzites, underlying schists.

Sericite, chlorite and other schists, (Gold bearing series) mostly of ingneous origin.

Band of limestone along edge of valley

Gravel flats, broken by low terraces.

Tuffs, agglomerates etc.

Andesites, porphyrites etc.

Surveyed and compiled by J.Keele
Drawn for photolithography by O.E.Brodhecker

Scale 2 miles to 1 inch

1 ½ ¼ ¾ 0 1 2 3

752

consist of hard micaceous quartzites, passing into mica-schists. These rocks are exposed along the eastern slope of the mountains referred to above, as bounding the auriferous plateau on the east. They are interbanded towards the top with crystalline limestones and are overlaid by green chloritic schists, probably representing crushed diorites or diabases. The green schists are followed in ascending order by gray quartz-biotite schists, white and light gray sericite schists, ressembling the gold-bearing schists of the Klondike series and probably like them of igneous origin, lead-coloured argillites, a second series of green rocks, mostly tuffs, above which is a wide band of hard cherty limestone forming the western edge of the plateau. The schists and associated quartzites and limestones have a nearly north and south strike and dip steadily to the west at angles of from 20° to 50°.

Character of rocks.

The high narrow plateau bordering the valley of the South fork on the east, in which most of the gold streams of the district have their sources and which all of them traverse, is thus seen to be built almost entirely of micaceous schists of various kinds, and from these rocks the gold of the district undoubtedly originated. The schists are partly of igneous and partly of clastic origin and resemble in a general way the gold-bearing schists of the Klondike district.

Origin of gold.

The ridge between the South fork of the Salmon and the Teslin river is built of comparative recent volcanic rocks consisting largely of andesites, augite-porphyrites and allied varieties. Basalt occurs at the base of the western slope, and tuffs and agglomerates on the eastern slope.

The schists east of the South fork are cut, south of Mendocina creek, by some dykes and a couple of small bosses of gray biotite granite. This rock is not conspicuous in the district, but is apparently widely distributed further to the south, as the wash in the South fork is largely granitic.

Granite.

Gold-bearing Streams.

Gold has been found in some quantity on all the streams traversing the high plateau, previously described as occurring east of the South fork, along a stretch about twelve miles in length extending from Sylvia creek to Mendocina creek. The schists which underlie this portion of the plateau continue on both to the south and to the north and it is probable that the field will be extended as prospecting continues.

The most productive stream so far discovered is Livingstone creek. This creek has a total length of ten miles. Its general course is

Livingstone creek.

westerly, but four miles above its mouth it enters an old longitudinal valley which cuts off a segment of the plateau, and turns abruptly north for two miles before crossing the flats to join the South fork. It is a fair-sized stream, measuring about fifteen feet in width at ordinary stages of the water, where it leaves the hills. The current is very swift, as the grade is steep, exceeding 400 feet to the mile in some places.

Character of rocks.

The valley of Livingstone creek differs considerably in character from that of the Klondike creeks. In its upper part, it is a deep, rounded depression, evidently modified by glacial action, terminating in a steep-sided amphitheatrical basin. Farther down, the valley narrows in and becomes a canyon bounded by steep rocky walls separated at their bases by a narrow flat from 50 to 100 feet in width. The canyon portion of the valley has a length of about three-quarters of a mile and ends abruptly at the old valley previously referred to, which the creek enters after leaving the plateau.

The workings on Livingstone creek so far have been confined principally to the canyon portion of the valley. Discovery claim, on which the most work has been done, is situated near the head of the

Gravels.

canyon. The gravels here and along the canyon generally are quite shallow, seldom exceeding three feet in depth, and in places the bed-rock is bare. They are, unlike the Klondike gravels, only partially derived from the rock exposed along the valley, and include much foreign glacier-borne material, largely of a granitic character. Boulders are numerous and are often of large size, some of them measuring six to eight feet or more in diameter. The heavy grade of the valley renders hydraulicking practicable, and on Discovery claim the water is flumed along the bank until a head of about fifty feet is gained and it is then used to ground-sluice the light wash in the bed of the stream. The heavy boulders are removed, when necessary, with a derrick.

Character of gold.

The gold is found principally on bed-rock or in the crevices of the rock and as a rule is very coarse. A third of the gold obtained from Discovery claim consisted of nuggets over an ounce in weight, and none of it, I was informed by the manager, could be called fine gold. The largest nugget obtained was valued at $304, and the second largest at $295, assuming the gold to be worth $16 to the ounce, the ordinary price. The assay value of the gold is stated to average $18.20 to the ounce. A few of the nuggets show a rough surface and include fragments of quartz, but as a rule they are worn quite smooth. This is probably due largely to the attrition of the sediment in the stream, as it is impossible that gold of this character could have been carried for any considerable distance.

Discovery claim is stated to have produced $11,000 in 1900, and a small amount in the preceding year. The product of the present season was not ascertained, but the 'clean up' which was made at the time of my visit was very satisfactory and the output for the season will probably be considerable. The ten claims below Discovery claim and extending from it down to the foot of the canyon are very similar in character to Discovery claim. They are owned by a company and preparations are being made to work them on a extensive scale during the coming season.

Claims above canyon.

Very little work has been done on Livingstone creek above the canyon, as the ground is much more difficult to prospect. The gravel is much deeper, and as it is not frozen except in sheltered spots, work on the shafts has mostly been stopped before bed-rock was reached by the inflow of water. The claims will require to be drained before they can be worked and this can only be done by a company owning several of them, or by a number of the claim owners combining and working their properties in common.

Below the canyon, the creek, as stated before, enters an old valley and runs for some distance at right angles to its former course. The gravel in this portion of the valley proved to be very deep. A number of shafts have been sunk, one of them to a depth of over seventy feet, without reaching bed-rock. Work on most of these shafts was stopped by water before any results were obtained.

Summit creek.

Summit creek, two miles north of Livingstone creek, and running parallel with it, is a much smaller stream, scarcely measuring six to eight feet in width where it leaves the hills. It heads in the plateau and, after a course of less than three miles, cascades down into a longitudinal valley, which here follows the base of the hills and runs north to Cottoneva creek. Its valley, where it leaves the hills, is narrow and canyon-like in character, but above the cascade it gradually widens out and assumes the form of a brodd rounded and comparatively shallow depression.

Discovery claim, on this creek, is situated at the foot of the cascade. The gravels here are shallow and include, as on Livingstone creek, numerous granitic boulders. The claim is worked by ground-sluicing, water for this purpose being easily and cheaply obtained from the cascade. About $1,200 was taken out in 1900. The gold is similar in character to that from Livingstone creek. The claims above the cascade have not been prospected, although some work has been done. The gravels deepen rapidly in ascending the valley, and work on the few shafts which have been started, has been stopped by water before bed-rock was reached.

Lake creek. Lake creek, a mile north of Summit creek, is about equal in size to the latter and its general character is very similar. Discovery claim on this creek, is situated above a cascade, which occurs, as on Summit creek, near the brow of the plateau. The gravels at this point, and for a few claims above, are comparatively shallow, averaging from four to eight feet in depth and can be easily worked. Work had only begun at the time of my visit, but some gold was being taken out and the miners appeared to be very hopeful in regard to the future of the creek.

Cottoneva creek. Cottoneva creek, three miles north of Lake creek, is a much larger and longer stream and it has cut a more uniform grade down from the plateau. A canyon, half a mile in length, occurs about a mile from the point at which it leaves the hills. Above the canyon the valley is wide with gently sloping banks. The first discovery in the district was made on this creek in 1898, but the yield has been small and at the time of my visit no work was being done. The gravels are reported to be deep and difficult to work above and below the canyon, and in the canyon, where they are shallow, they do not appear to be productive. Besides the creeks briefly described above, good prospects have been obtained from Martin and Sylvia creeks, south of Livingstone creek, and from Little Violet and Mendocina creeks north of Cottoneva creek, and on the opposite side of the valley some work was being done near the mouth of St. Germain creek, a stream heading in the range west of the South fork.

Production of field. The total production of the Salmon river gold-field up to, but not including the present season, was estimated at $20,000, the greater part of which has been obtained from Discovery claim on Livingstone creek. Work in the district has, however, barely commenced, notwithstanding the fact that gold was discovered as early as 1898. The field can only be considered of moderate richness and the fame of the Klondike creeks drew most of the miners to that section. The outlying camps are now, however, receiving more attention and it is expected that work in the future will be more vigorously prosecuted.

Yukon River.

Rocks along Yukon valley. After leaving the Salmon river gold-field we descended the Lewes and Yukon rivers in a Peterborough canoe, and a few days were spent in making an examination of the geological section exposed along the Yukon valley below Fort Selkirk. Only a brief reference to this work will be made here. The rocks at Fort Selkirk and down the Yukon valley for fifteen miles consist mostly of diabases, coarse tuffs and

agglomerates. These rocks are underlaid by a highly altered clastic series consisting largely of quartz-mica-schists, quartzites and crystalline limestones. The clastic series, in a more or less altered condition, occurs at intervals along the valley down to the mouth of Forty-mile river and probably beyond. It alternates in broad bands with igneous schists and gneisses, derived mostly from granites, quartz porphyries and diorites. The granite gneisses have been regarded as the oldest rocks in the Yukon valley, but positive evidence was obtained during the course of the exploration that they are really younger than the altered clastic series and have been intruded through them. The old igneous schists, and to a less extent the clastic schists, are very important from an economic standpoint, as they constitute the gold-bearing rocks at all the camps so far examined. They are broken through at numerous points along the valley by intrusives of various kinds and are overlaid in places by more recent rocks, but a description of these does not come within the compass of this report.

Thistle Creek.

Thistle creek. Thistle creek enters the Yukon from the east about eight miles above the mouth of White river. It is about eighteen miles in length and towards the mouth from fifteen to twenty feet in width. The valley is flat-bottomed in the lower stretches, the flats varying in width from 150 to 400 yards, but towards the head it narrows into a V-shaped gulch. The bordering hills have a general height above the valley of 1,000 feet to 1,500 feet, but in places slope up to sharp peaks and ridges very much higher. Terraces occur at intervals, but do not form continuous lines. The grade of the valley increases gradually towards the head. Six miles above the mouth it amounts to 50 feet to the mile, and at twelve miles to 100 feet to the mile.

Valley.

Work done. Discovery claim on Thistle creek is situated about six miles above the mouth. The creek was staked in 1898, but the work done on it up to the present has been inconsiderable. At the time of my visit some work, chiefly of a prospecting character was being done on claims 17 and 19 below and 9 above Discovery on a terrace opposite 9 above, and at the mouth of Edas gulch which comes in opposite 12 below. The gravels on Thistle creek resemble those on the Klondike creek. They consist principally of flat schistose pebbles, imbedded in coarse sand, and include occasional boulders of quartz and granite. They have a thickness in the vicinity of Discovery claim of from four to six feet and are overlaid by a layer of muck, usually from 8 to 10 feet in thickness. The terrace gravels are coarser than

Gravel

those in the creek and have a thickness at the rim of the bench opposite Discovery claim of 25 feet.

Gold.

None of the Thistle creek claims yet worked have proved very rich. The gold is irregular in its distribution and so far has been found principally along the left limit of the valley close to a well defined terrace which extends from claim No. 9 above Discovery down stream about three miles. The gold is found principally on or in bed-rock and occurs in coarse grains and nuggets. The largest nugget reported came from claim No. 1 above Discovery and was valued at $96. The total product of the creek is estimated at $10,000.

Henderson Creek.

Henderson creek.

Henderson creek enters the Yukon from the east about three miles below the mouth of the Stewart. It is a longer stream than Thistle creek and carries considerably more water, but is very similar in general character. It occupies a flat-bottomed valley of the usual type, bordered by fairly steep, mostly wooded, banks which are, in places, interrupted by irregular disconnected benches, but the banks are not conspicuously terraced.

Rocks.

The rocks exposed along the valley consist, as on Thistle creek, mainly of granite gneisses and other igneous schists. At the Forks, three miles above the mouth, inliers of white crystalline limestone associated with quartz-mica-schists and quartzite were noticed, and andesites occur in a group of high rounded hills near the head of the creek.

Work done.

Only one claim was being worked on Henderson creek at the time of my visit. The creek was hurriedly and inadequately prospected in 1898 and since then has been practically abandoned. The claim which is being worked is situated about fourteen miles above the mouth of the creek and just below the junction of the main branch with Sixty-mile creek. It is owned by two Australian miners who have worked it partly by drifting and partly by the open-cut method for several seasons, and are apparently quite satisfied with the result. The gold is finer than on Thistle creek and is not concentrated near bed-rock, as is the case on that creek, but extends, like the Bonanza creek gold, upwards into the gravels for several feet. It is unlikely that this claim is the only one containing pay gravel in this portion of the valley and systematic prospecting on some of the adjoining claims would probably lead to equally good results.

Sixty-mile District.

The gold creeks of the Sixty-mile district are situated near the Alaskan boundary, about forty miles directly west from Dawson. They can be reached by ascending Forty-mile river, a western tributary of the Yukon, to the mouth of Moose creek a couple of miles west of the International boundary, from which point a good trail about twenty miles long leads to the principal creeks ; or by a pack trail from Dawson, 56 miles long which follows the divide between Swede creek and the Yukon, or by ascending Sixty-mile river. The latter route is seldom used, owing to the shallowness of the stream, and the numerous bars and rapids which interrupt its course. All these routes were traversed in the course of the present exploration. The writer reached the district by Forty-mile river and the Moose creek trail, and descended Sixty-mile river on the way back in a small canvas boat which was portaged across from Forty-mile river for the purpose, while Mr. Keele travelled by the overland route and made as careful a survey of it as time permitted.

Routes to Sixty-mile district.

Geology.

The rocks in the Sixty-mile district are similar to those occurring on the Yukon valley above Dawson. The beds have a general east and west strike, and a section across them from Forty-mile river south to the Sixty-mile shows two broad bands of dark quartz-mica schists, quartzites and crystalline limestones, similar to the rocks described by me in a former report as the Indian river series, separated by a band of igneous schists four to five miles in width. The latter consist partly of gray granite-gneiss, and partly of light-coloured sericite schists derived mostly from quartz-porphyries. The schists are replaced near Sixty-mile river by andesites and are overlaid on Moose creek by a small area of conglomerates, probably of Cretaceous age.

Character of rocks.

Gold-bearing Creeks.

Coarse gold was discovered in the Sixty-mile district in 1893, and from that time up to the discovery of the Klondike creeks in 1896, it was one of the principal producing camps in the Yukon country. It was practically abandoned in 1897, but lately the miners have been returning to it. At the time of my visit, about forty men were at work.

The principal creeks are Miller and Glacier* creeks on the Sixty-mile slope, and Moose creek, a tributary of Forty-mile. Moose creek is a

Moose creek.

* A detailed description of Miller and Glacier creeks, by J. E. Spurr, is published in the eighteenth Annual Report of the U. S. Geological Survey, pages 320-326.

large stream, about twenty feet wide at its mouth, and about fifteen miles in length. Its valley is about 200 yards wide in the lower reaches, but gradually contracts towards its head into a narrow gulch. Gold in small quantities is found all along the valley, but only a short stretch, barely a mile in length, commencing about ten miles above its mouth, contained claims rich enough to work. The gravels had a depth of from two to four feet, and the gold occurred in a narrow pay streak in the centre of the valley. The total amount produced is given at $5,000 only.

Glacier creek.

Glacier creek is a tributary of Gold creek, and joins the latter a mile above its mouth. It is a small stream, from two to three yards in width, and less than seven miles in length. The grade is steep, amounting to about 100 feet per mile in the lower part of the valley, while further up it becomes much steeper. The valley conforms to the usual type. The upper part is a narrow gulch, but in descending, it gradually widens, and towards its mouth has a breadth of 200 yards. It has been worked from claim No. 28, above Discovery, down almost to its mouth, a distance of about five miles. The pay streak from No. 21 above, down to No. 17 above, is reported to have been very continuous but quite narrow, less than twenty feet in width. Farther down it widened out and became more spotty. Claim No. 18 below is stated to have been the best claim on the creek. The valley gravels have a thickness of from six to ten feet and are overlaid, as on the Klondike creeks, by a varying thickness of black muck. They have been mostly worked over, but a few claims, too low in grade to pay in the early days, still remain, and some gold was also being obtained from a few of the richer claims which had been imperfectly or only partially worked.

Terraces.

The terraces on Glacier creek were neglected up to the last year or two, but are now being worked at several points. Well defined benches occur on the left limit, opposite claims 10 and 12 above, and on the right limit opposite No. 6 below and down the valley for some distance farther. The bench opposite No. 10 above, is interesting in as much as the workings, consisting of three shafts, one 62 feet deep, prove the existence of an old channel, separated from the present creek channel by a rock ridge 27 feet high and about 200 feet in width. The old channel has an elevation of 75 feet above the present one. Pay was found in one of the shafts, and the owners expect to work the claim from a tunnel which they are driving through the rock ridge. At claim No. 6 below, good pay has been struck on a terrace on the right limit 40 feet above the valley bottom. The gravels here have a thickness of about 50 feet.



SKETCH MAP

of

SIXTYMILE RIVER GOLD-FIELDS

to accompany Summary Report by

R. G. McCONNELL, B.A.

1901

Scale 6 miles to 1 inch

1 ½ 0 1 5 10

Discovery Points on various creeks shewn thus ⊸●

Surveyed and compiled by J. Keele, B.A.Sc.
Drawn for photolithography by O.E. Prud'homme.

The terrace gravels of Glacier creek are ordinary stream wash, deposited before the valley had been sunk to its present depth, and they have no resemblance to the enigmatical quartz drift or white wash of Bonanza and Hunker creeks.

Miller creek, west of Glacier creek, empties into Sixty-mile river. Miller creek. It is somewhat shorter than Glacier creek, about equal to it in size, and its general character is very similar. Miller creek was considered a very rich stream in early days, and for two or three years after its discovery, it ranked as the chief producer in the Yukon country; but it is now nearly exhausted so far as the valley gravels are concerned. Terraces occur on the left limit from No. 2 below, down to about No. 20 below. They were only discovered recently and are still practically unworked. A terrace claim opposite creek claim No. 17 below, is stated to have yielded $18,000 during the past season. The terrace here has an elevation of fifty feet above the creek bottom and the gravels have a thickness of about fifteen feet near the rim, but evidently deepen considerably, farther back. Terraces.

Other creeks in the district are Poker and Davis, both of which head in the Yukon territory, but have their principal productive portions in Alaska; and Gold creek, Twelve-mile creek and California creek, tributaries of Sixty-mile river from the north, all of which show prospects, but up to the present have afforded no paying claims. The total production of the Sixty-mile creeks is difficult to estimate at this late date, but was probably less than half a million dollars. Other creeks.

The gold on Miller and Glacier creeks is derived, in large measure, directly from the quartz veins and silicified schists of the district, but some evidence was obtained in the course of the exploration, serving to show that some of it has been deposited from solution. A boulder was found in one of the workings on Miller creek, the upper surface of which was partially covered with specks and scales of crystalline gold. The crystals were arranged in dendritic forms, and while some of them were firmly attached to the rock, others separated easily from it. The angles of the crystals were sharp and showed no wear of any kind, while the boulder itself, an autoclastic quartz-mica schist, was well rounded. The gold evidently did not belong to the rock originally, and the only explanation of its occurrence under the peculiar conditions stated, seems to be, that it was taken up by some solvent and redeposited on the surface of the boulder in the position in which it was found. A number of specimens of unworn crystalline gold in filiform and dendritic shapes have been found on Eldorado and other Klondike creeks, which were probably formed in the same way, although no direct evidence of this has hitherto been obtained. Derivation of gold.

Sixty-mile River.

Sixty-mile river.

A track-survey was made down Sixty-mile river from the International boundary to its junction with the Yukon. This stream heads in Alaska and has a length, after crossing into Canadian territory, measured along the valley, of about 70 miles, and following the windings of the stream, of about 125 miles. Its fall, measured roughly with the barometer, from the boundary to the Yukon, amounts to 1,425 feet, and the average grade of the valley to a little over 20 feet to the mile.

Size of stream.

Sixty-mile river, at the Boundary, is a rapid winding stream averaging about 50 feet in width and interrupted at frequent intervals by steep bars covered with only a few inches of water. The upper portion of the river from the Boundary to California creek can hardly be considered a navigable stream even for small boats. Below California creek the volume of water increases and the descent becomes less difficult, but bars and rapids continue almost to the mouth and no part of the river is easy to ascend. The tributary streams are small, as a rule, but two large streams, one draining the country to the west and the other to the south, come in within four miles of each other, nearly opposite Indian river and these branches nearly double the volume of the main river. Towards its mouth Sixty-mile has an average width of from 40 to 50 yards.

Valley.

The valley of Sixty-mile is generally flat-bottomed, the flats varying from a couple of hundred yards to nearly a mile in width. The sides are usually terraced and in places, the stream for long distances, has cut a secondary rock-walled channel, similar to that noticed on Indian river and the Stewart, through the bottom of its old valley. The country bordering Sixty-mile river forms part of the Yukon plateau, a highland worn into rounded hills and long zigzag ridges, but containing no well defined and continuous mountain ranges. At several points, high hills usually built of andesite, project a few hundred feet above the general level.

Geology.

Sixty-mile river affords a very good geological section, but only the salient points of this can be given here. At the Boundary and down the valley to Bed-rock creek, the rocks consist principally of igneous schists of various kinds, largely granite-gneisses, with which are associated some quartzites and other clastic schists. These schists constitute the gold-bearing rocks. They are replaced below Bed-rock creek by andesites which continue down to a point a mile and a half below the mouth of Gold creek. The andesites extend up Miller creek nearly three miles and up Gold creek over seven miles. Their distribution

south of Sixty-mile river is not known, but they apparently cover a considerable tract of country in that direction.

Rocks of Sixty-mile.

Below Gold creek the granite gneisses and associated igneous and clastic schists reappear and are exposed along the valley down to a point five miles below the mouth of a creek. The schists, in this stretch, are cut by numerous intrusions of newer granite, and quartz veins are fairly abundant. They are succeeded by andesites, basalts and other volcanics, and these rocks, alternating with basins of sedimentary strata consisting mostly of conglomerates, agglomerates and shales, probably of Cretaceous age, continue down the valley for twenty miles. Below that point the granite-gneiss and included clastic schists and crystalline limestones appear again and outcrop along the valley down to the mouth of the river. The gold-bearing rocks, it will be seen, occupy the upper and lower parts of the valley but are covered up along the central portion by more recent and, so far as known, barren rocks. Some bars were worked in early days on Sixty-mile river, but so far as could be learnt, none of them proved very rich and at the time of my visit no work of any kind was being done.

Quartz Veins.

Quartz veins.

Considerable prospecting for quartz has been done in the Klondike district and in other parts of the Yukon country during the past season, and numerous discoveries of more or less importance have been reported. The old igneous and clastic schists referred to previously as the gold-bearing rocks and which have such a wide distribution along the Yukon valley, are cut everywhere by quartz veins and in places these become so abundant as to constitute a considerable proportion of the whole rock-mass. The majority of the veins follow the planes of schistosity or cut them at a small angle. They are narrow and non-persistent as a rule, but occasionally swell out into lenses of quartz six to eight feet or more in width. These veins often give fair assays and in places show free gold, but except in rare instances they are too small singly to make mines. The discovery of a zone of small auriferous quartz veins closely grouped together, and capable of being worked together, is however possible, and in a region so highly silicified as the Klondike district, even probable.

New Bonanza and Lone Star claims.

Before leaving Dawson, a visit was made to the New Bonanza and Lone Star claims at the head of Victoria gulch, a tributary of Bonanza creek. The development work done on these claims consists of a few shallow shafts or pits, none of which reach any considerable depth. At one of these openings on the New Bonanza, a kidney of quartz,

Gold in quartz.

over six feet in width has been uncovered for a few feet, one end of which is studded with grains and nuggets of gold. A second opening, 200 feet to the south-east, has been sunk in a smaller quartz vein, also carrying free gold. A specimen of quartz from this vein, in which no free gold could be detected with the naked eye or an ordinary magnifying glass, was assayed in the laboratory of the Survey and gave 2.625 ounces of gold and 3.267 ounces of silver to the ton. The country rock, mostly sericite schists, adjoining the seam, also proved to be auriferous. Other small veins occur to the north-west, following the same south-east and north-west strike as those above mentioned. The work done on these claims is insufficient to base an opinion on as to their ultimate value, but the prospects are certainly encouraging enough to warrant further investigation.

The existence of a group of quartz veins at the head of Victoria gulch, carrying free gold in such quantities, is interesting from the fact that the pay streak on Bonanza creek practically stops at the mouth of this gulch. Victoria gulch itself is gold-bearing, and the gold obtained near its head is rough and unworn and looks as if it had just dropped out of its original matrix. It is not inferred from this, of course, that all the gold on Bonanza creek originated from this source, as the coarse gold found along this stream could not have travelled any distance, but that some of it came from this point seems beyond question.

Quartz veins on Sixty-mile river.

Quartz veins are prominent in places along Sixty-mile river and a couple of specimens collected proved to be auriferous. A vein about four feet wide cuts the granite-gneisses about a mile below Twelve-mile creek, in the upper portion of the river. A specimen from this vein was assayed in the laboratory of the Survey and yielded 0·058 ounces of gold to the ton. A seam was also found about six miles above the mouth of the river, on a bluff 200 feet above the level of the valley, a specimen from which assayed 0.117 ounces or nearly $2.50 to the ton. This seam consisted of light brown drusy quartz and at the point examined it was fully eight feet in width. It apparently belongs to a different class from the ordinary small gash veins of the districts, and is worth a closer examination, as the proportion of gold usually varies along the strike and portions of this vein may be rich enough to work.

Quartz veins occur in the schists of the Salmon river country, but the only specimens assayed from this district proved to be barren. Specimens from a vein on Fish creek, a tributary of the South fork, which carried iron and copper pyrites and gelena were shown to the writer. The seam is stated to be of large size, but it was not examined.

River Dredging.

Dredging at Cassiar bar.

The dredging operations at Cassiar bar, on the Lewes river, in 1900 proved a failure. About 50,000 cubic yards of gravel were washed, and the average yield, so I was informed by one of those interested, averaged only five cents per cubic yard. The bar has been abandoned and the plant transferred to a claim on Bonanza creek, where it is reported to be doing satisfactory work. Cassiar bar was worked in early days by the miners, and was supposed to offer exceptional facilities for dredging. The failure there has, on this account, led to an impression that a like result would attend dredging operations in any part of the district. This opinion, it seems to me, is not well founded.

Character of river gold.

Cassiar bar is situated a long distance from the source of supply and, as a consequence, the gold is very light, and is confined, as is usual in such circumstances, to a thin layer of gravel immediately beneath the surface. The conditions are entirely different on streams or portions of streams, near to, or cutting the rocks from which the gold originates. The grains in the latter case are heavier, are less easily moved, and the gravels increase in richness, as a rule, towards bed-rock.

Gold coarser near sources of supply.

The bars on Forty-mile river, a stream cutting the gold-bearing schists throughout nearly its whole course, afford a good example of this. The gold on the auriferous bars on this stream is much coarser than that obtained from Cassiar bar and the best pay occurs near bed-rock. The gravels on the Klondike river below the mouths of the gold-bearing creeks has been proved to be auriferous to some extent down to bed-rock, and gold, in grains much coarser than the ordinary flake gold of river-bars, has been found in the bed of the Stewart, and also on the bars of the Big Salmon. Whether dredging would pay on any of the streams mentioned, is a question which can only be answered by careful prospecting or actual work, but it is obvious that the result of a single experiment cannot be accepted as settling the matter in the negative for the whole district.

The Geology of the Region adjoining the Western Part of the International Boundary.

Dr. Reginald A. Daly.

Geologist to Boundary Commission.

The government having decided to send a geologist, as a member of the Canadian Commission appointed to co-operate with the United States Commission in locating the International Boundary, which was to begin operations at the western extremity of the line last spring, I

was asked to name a suitable person for the position. I recommended Dr. R. A. Daly, a Canadian, who was instructor in geology in Harvard University. He was appointed and entered upon his duties in the end of June. He reports as follows upon the season's work :—

Instructions.

On June 29 I left Ottawa to join the Boundary Commission party which was under the direction of Mr. J. J. McArthur, D.L.S. The axemen of Mr. McArthur's party had already been some five weeks engaged in cutting trails to Chilliwack lake and beyond, where the monuments of the 1859-61 Commission were to be examined and vistas cut through the forests on the line of the 49th parallel of latitude. My instructions were to use the commission camp as headquarters and to work out the geology of as broad a belt north of the International Boundary as could be reached from that camp.

A brief stay at Banff and another at Dield enabled me to get a glimpse of the Canadian Cordillera and, especially of the Carboniferous, Devonian and Cambrian members of the system. While awaiting the steamer from New Westminster to go up the Fraser, I made a short visit to Victoria, where I was particularly impressed with the remarkable traces of glaciation near that city. Returning to the mainland, I arrived at Chilliwack village on July 9, but, on account of difficulties of the trail, did not reach camp at the upper end of Chilliwack lake before July 14.

Length of season.

I remained in the field until October 29, and returned to Ottawa three weeks later, by way of San Francisco, Salt Lake City and Denver. Believing that even a rapid railway trip could aid one greatly in bringing into sharper relief the contrasts and similarities of structure and of form in the mountains of Canada and the United States, I chose this roundabout route. The North American Cordillera will be understood, as a whole, only after Canadian and American cross-sections are correlated, a treatment which, for this orographic system, stands among the more pressing desiderata of present day research.

Correlation of American and Canadian geology.

The tracing along the strike of the different mountain belts from the one country to the other, offers related problems of the highest importance. Examples are to be found in the search for the equivalent, in Canada, of the Basin Ranges, as these disappear under the vast lava cap of Oregon, Washington, and Idaho, and again, in the study of the zone of transition between the physiographic type of the Canadian Rockies and the quite different type represented in the Big Horn mountains of Wyoming or the Colorado Front range. It was, therefore, with peculiar interest that, for the first time, I saw, even fleetingly, the Cascades with their associated volcanoes, the Sierra Nevada

fault-block, the ranges of the Great Basin, the shore-lines of Lake Bonneville, the canyons of the Eagle, Grand and Arkansas rivers, some of the Colorado ranges and a typical Rocky Mountain 'park.' A more prolonged study was made of the classic section near San Francisco, from which the proofs have come of the extra-ordinarily recent origin of the Coast range of California; in making this excursion, I was directed by Professor A. C. Lawson, formerly of this Survey, and by Mr. Calkins, assistant geologist in the American staff on the International Boundary Commission. A day was spent among the modern gold-mining plants of the Cripple Creek district; a second, in visiting smelting and chlorination plants at Colorado City and Denver.

My outfit and the expenses of the season were supplied by the Department of the Interior, through Mr. King, our Chief Commissioner. I secured an excellent assistant in Mr. F. Nelmes, of Chilliwack, who helped me greatly at all times, but particularly during the more difficult climbing. Until September 17, we remained in direct communication with the main camp, but, thereafter, until October 18, we employed a small independent pack-train and camping outfit.

Conditions of work.

While the month of June had been characterized by almost continuous rain, our party was fortunate in having extraordinarily fine weather until September 1, and indeed, the meteorological conditions for field-work were favourable even as late as October 15. We were assured by the ranchers of the Fraser and Chilliwack valleys that so long a period of fair weather had never been recorded there before. Offsetting this good fortune to a large extent, work was seriously interfered with during August and part of September by a heavy pall of smoke borne into the mountains from forest-fire or ranch-clearing by the prevailing westerly winds. The smoke was usually so thick as to make photography, sketching and even intelligent mapping of outcrops either impossible or of indifferent success. The burning of the bridge across the Chilliwack river was a further cause of interruption in the progress of the work.

Difficulties.

The excessive ruggedness of the belt traversed, coupled with the well-known luxuriance of the dense Coast Range forest, its brulés, windfalls, devil's club, vine-maple and other underbrush offered, however, the greatest impediment in carrying on the work of the summer. Even under the able leadership of Mr. McArthur, our large party of axemen barely succeeded in opening the trails required to give access to the whole number of boundary monuments, before the bad weather of the autumn forced me to relinquish work in the mountains.

Construction of sketch-map.

The existing topographic maps of the region investigated were found to be entirely inadequate as a basis for geological plotting. For this reason, much time was spent in making a sufficient number of sketches, photographs and barometric readings, and in carrying on a rough triangulation, to suffice for the compilation of a 250-foot contour map of the area, on the scale of one and one-half miles to the inch.

Area covered.

The area covered during the summer includes an east-and-west belt of country eighty miles in length, parallel to, and limited on the south by, the 49th parallel of latitude, with a breadth of 10 miles north of this line. It stretches from the Gulf of Georgia at Point Roberts to a meridian running about four miles east of Chilliwack lake. Approximately the eastern half of this belt is mountainous, lying entirely within the western versant of the Coast range. The western half covers the flats of the Fraser delta and the waters of Semiahmoo bay. The first mentioned division comes within the drainage system of the Chilliwack river, and includes Chilliwack lake, the deep canyons of Middle (or Nesaquatch), Slesse, Tamihy and other creeks tributary to the river. The intervening mountain ridges, with part of the lofty Cheam range and the isolated Sumass and Chilliwack mountains rising out of the Fraser valley alluvium, claimed most of my attention for the season. The relative accessibility of the western half of the area, the simplicity of its formations and the absence of important outcrops of bed-rock, warranted a comparatively rapid study of the flats.

Geological conclusions.

The following remarks are not intended to be so much a summary of results, as a preliminary statement of certain general conclusions which will receive amplification when the topographic sketch map is completed, the plotting of geological observations accomplished, photographs developed and specimens examined in the laboratory.

Considering the whole length of the transmontane section that lies before the geologist of the commission, this season's work was disappointing as to the amount of ground covered. The lack of trails on the eastern slope of the Coast range forbade my carrying the section farther east this year. The enforced concentration of field-work on the area actually covered was, however, a great advantage in reaching final conclusions as to the structure and age of the rocks within it.

The staple rocks of the Coast range are metamorphic. In the earlier reports of this Survey they bear the general name of the 'Cascade Crystalline Series.' Among the localities where metamorphism has least affected the rocks, allowing original structures and organic remains to persist in recognizable form to the present day, the long section of tilted shales and limestones briefly described by Bauerman, in the Chilli-

wack River Valley* seems to promise more information concerning the geological history of the southern portion of the range than any other section yet discovered. It was, however, only after seven weeks of search that the first fossil was found, and toward the end of the season that the most important faults and folds were determined in a satisfactory way. The more open country of the Skagit valley and still farther eastward will, I believe, permit of much more rapid reconnaissance.

Scenery of the belt.

By a curious accident, the International boundary line, roughly speaking, divides the Coast range into two parts of contrasted scenic quality. In Washington the summits are the higher and more peaked, the ridges the more serrate, while all are dominated by the majestic cone of Mount Baker; on the Canadian side the massifs are somewhat lower, are more rounded and less abundantly supplied with a perennial snow-cover. While this is true, the panoramas along the Chilliwack river are, nevertheless, most imposing. The inaccessible horn of Slesse mountain, 7,700 feet in height, is the loftiest peak of the belt, and the average height of some fifty other summits, determined barometrically, is over 5,500 feet. They win impressiveness in rising either from the floor of the Fraser valley, a few score of feet above the sea, or from the deely incised tributary valleys. The slopes flanking the canyons may be those of almost sheer precipices, 500 to 2,000 feet in height, or the usual ones of about thirty five degrees.

Origin of the relief.

All indications point to the fact that erosion is responsible for the existing form of these mountains. No constructional surface, other than those slopes assumed by moving rock-waste have been recognized in the belt; no fault-scarp or fold recent enough to have preserved any of its original form, even in a damaged condition, has been observed. Vigorous dissection by denuding agencies has removed a vast volume of rock from the structurally complex range. Yet the existing *diversity* of relief cannot be far from the maximum due to the cycle of degradation through which the mountains are now passing.

Glacial erosion.

A special cause for their ruggedness is found in the erosive activity of now vanished local glaciers, for the sierras and horns have been developed in harmony with the growth of numerous high-lying cirques, amphitheatres, cols, and deep reëntrants which appear in all parts of the region. The latter forms are believed to have been formed, or at least greatly enlarged, from once shallower depressions by local ice sheets of glacial times. The glaciation of the belt does not seem to

*Report on the Geology of the country near the Forty-ninth Parallel of North Latitude West of the Rocky Mountains, from observations made in 1859-61. Published in the Ann. Rep. of this Survey for 1882-4.

Denudation.

have been general at any time. The restoration of the rock material which has disappeared from corrie or col or deepened valley, would afford much more rounded contours and profiles than those now existing. We should probably have something approaching the full, swelling outlines of the unglaciated, deeply decayed, granitic mountains of Colorado-smooth slopes mantled with graded rock-waste. If those slopes were attacked by valley glaciers, as the glaciers of Switzerland and Alaska are now working, not only removing the pre-glacial cover of disintegrated rock, but deepening and lengthening valleys, heightening and driving backwards the head walls of ravine and corrie, there would result in Colorado a serrateness of topography perhaps as great as that over much of Washington or British Columbia.

Cirques.

Many of the corries in the belt are of extreme picturesqueness. Below magnificent head-walls and lateral precipices, one to two thousand feet in height, are to be found in several cases, rock-basin lakes or tarns; above are perennial snows capping the surrounding peaks which stand in pleasing contrast to the rich and heavy masses of evergreen forest in the tree zone. At the southern end of Chilliwack lake, I found a fine example of what may be called 'tandem cirques.' In this case two stately amphitheatres occupy the same valley, one above and *en axe* with the other. The upper one holds a true tarn; the lower is drained by a series of cascades into the lake. Another and a finer association of this kind was examined with ease from a trail between Slesse and Middle creeks, and leading to a gold property now being exploited by Mr. G. O. Pierce, at an elevation of 5,000 feet. Here three tandem cirques of considerable size succeed each other through head-wall descents of 1,000 and 300 feet. Two of them are occupied by rock-basin lakes.

Observations were made which warrant further inquiry on the question, whether the excavation of corries by glaciers is in any necessary relation to a combination of definite jointage and massive structure in the underlying rock, or at any rate, whether excavation leading to the peculiar forms of corried mountains, be not much facilitated by that combination. The best, if not all, the well defined cirques of this belt, were found either in the massive granite or massive diorite, which in both cases, seem to offer an overriding glacier much advantage in *plucking* out the joint blocks. The process of plucking undoubtedly plays an important part in all glacial erosion; in the formation of cirques it may thus assume special prominence.

Mountain tarns.

Nothing is more striking in connection with the tarn basins than the plain evidences that in the development of each one, the respective glacier moved uphill over the lip of the basin and with enough live

energy to score aud groove deeply its *moutonnée* surface. The smallest tarn visited was less than 300 feet in diameter, and from the size and position of its corrie, the glacier responsible for both must have been very small. Yet it moved with grooving power for a distance of fifty feet up a twenty-eight degree slope forming part of the lip of the basin. Similar observations were made elsewhere.

The elevation of the summits within the belt is not sufficient to permit of the flourishing of large glaciers at the present time, though a goodly number of fair size are to be found among the jagged peaks just across the boundary line. None in the belt is more than a quarter of a mile in length.

Origin of Chilliwack lake.

One of the most noteworthy constructive effects of the former glaciation is seen in Chilliwack lake, which owes its origin to a heavy morainal dam. Though only five miles in length and a little over one mile in breadth, this sheet of water must, for the grandeur of its setting, rank among the finest in the Dominion. It has some resemblance to Lake Lucerne, but, in the larger features of colour and form in forest, crag and glacier, the panoramas of the Canadian lake are certainly the superior. Some day, perhaps not far distant, it should be a favoured objective point for tourist travel. The moraine holding in the waters at the lower end of the lake, is a faintly crescentic accumulation of large granite boulders without any considerable intermixture of finer materials. It rises steeply from thirty fathoms of water to a rather even crest, 100 feet above the lake-level. Its length is about 2,000 yards, its breadth 500 yards, though it may be said to merge into the less definite deposits lower down. The moraine was built at a late stage in the history of a great west-flowing local glacier, the scorings of which were observed on both sides of the Chilliwack valley, at all elevations up to 5,200 feet above the sea. This thick tongue of ice may have been a distributary of the Cordilleran ice-sheet shown by Dawson to have covered the interior plateau in glacial times.

Description of Chilliwack Lake.

The lake is deep. Forty-four fathoms of water were found not far from the shore. Owing to a lack of sufficient line, I was not able to complete enough soundings to give either the maximum depth or the shape of the bottom. It is hoped that this, with a similar study of certain of the tarns, may be accomplished next season. Strong deltas at two of the inflowing streams and numerous alluvial cones about the lake, show that it is being rapidly filled. The lake is about 1,850 feet above the sea; the granite walls surrounding it rise steeply and abruptly from the water's edge 3,000 to 4,500 feet higher. If we may judge from the truncation of spurs lying between the tributary gulches, glacial erosion seems to have given its present fiord-like character to

the valley. What originally fixed the axial trend of the valley, may, perhaps, never be told, yet there is a marked parellelism between it and a system of master-joints in the granite, which suggests an adjustment analogous to that of a subsequent stream on a belt of soft rock in a tilted sedimentary series.

River terraces.

Excellent land for farming purposes occurs on broad heavily timbered benches extending from the lake dam, or a little below it, to the Fraser flats. The bench form is due to the terracing of glacial gravels, sands and clays by the torrential river. The material thus removed from the valley, together with similar products from side valleys, have been carried through a narrow 'iron gate' or rock-gorge, where the river debouches from the mountains, and there built into a flat alluvial fan. The apex of the fan is about seventy-five feet above the flooded Fraser, and its radii extend five miles or more to Sumass mountain. The size of the fan recalls the still larger fan of the Bow River and the finely mapped examples on the flanks of the San Bernardino mountains, California. By the vigorous growth of the Chilliwack fan, several small streams flowing northward between Vedder and Sumass mountains have been dammed up and Sumass lake is the result. Although possessing in time of high water, an area of about fifteen square miles, this lake is in all parts usually under ten feet in depth, excepting in the channels of inflow and outflow. In late summer, the maximum depth decreases to less than six feet and the area diminishes accordingly. A plan to drain the lake and, by suitable dyking, to reclaim not only its bed but enough of the surrounding land subject to freshets to make a total of thirty thousand acres, has been developed and needs only capital to bring it to a successful issue. The engineering difficulties can be evercome with an expenditure that is small compared to the great value of this particular land. The latter is probably as rich as any part of the Fraser valley, and needs no clearing, since it is either prairie or lake bottom to-day. The tract further enjoys the advantages of proximity to growing markets and of being part of the limited farming land of British Columbia. Capitalists will do well to examine the project with experts on the ground. One of the chief hindrances to the successful prosecution of the scheme, is the strong flooding of the Chilliwack, which obeys the law of streams on their alluvial fans of periodically shifting its bed from one to another radius of the fan. The expense of securely dyking in the river could, however, be partly compensated for by the cheapness of the water-power for pumping, dredging or other purposes; some forty feet of fall in the river may be secured for turbines and would furnish a great store of energy.

Fan of the Chilliwack river.

A fortnight was spent in a rapid study of the Fraser delta, utilizing the river-banks, the sea-cliffs near Blaine and at Point Roberts, the

Yale wagon-road, and the railroads intersecting the belt. The chief result was to show that the delta is compound in nature. At Hunting- Fraser delta.
don, at 'Mount' Lehmann, at Point Roberts, across the river from New Westminster and elsewhere, are broad flat-topped plateaus of washed gravels and sand with associated local patches of typical till. The average height of the plateaus is about two hundred feet. They are considered as remnants of a great accumulation of débris, partly alluvium, partly ice-laid drift, spread out over the lower part of the Fraser valley in glacial times, after the manner of delta-growth in front of Alaskan glaciers at the present time. Post-glacial uplift has enabled the powerful distributaries of the river to cut to pieces the original delta, so that now but small portions of its surface are to be seen. The process is thus related to the strong terracing of the upper part of the Fraser valley. The prairies about Ladner's Landing are situated on the newer delta which is now advancing rapidly into the Gulf.

For reasons already stated, this report must be particularly brief Bed-rock geology.
with respect to the geology of the fundamental rocks or in any discussion of the mining prospects of the belt. What appears to be the oldest formation in the area is represented in a series of coarse and finer-grained, plicated quartz-hornblende gneisses associated with diorites. They occur along the western base of Vedder mountain in the form of a narrow band of rock, limited on the north-west by the alluvium of the flats. Overlying the gneisses—doubtless unconformably—is an extremely complex group of feldspathic sandstones, grits, conglomerates, shales and quartzites, the last being of a characteristic green colour on exposed surfaces. They have as yet yielded no fossils, but the somewhat peculiar nature of the sandstones and quartzites suggests the correlation of the series with a much greater development of similar rocks outcropping abundantly in the walls of the Tamihy Creek canyon. These latter beds, too, have afforded no fossils. They underlie unconformably a third series of rocks, consisting of black and gray shales and bluish-gray, semi-crystalline limestones aggregating over 2,500 feet in thickness. Both shales and limestones have furnished organic remains.

The shales in the upper part are abundantly charged with molluscs, Fossils.
brachiopods and crinoids in so poor a state of preservation that they prove as yet simply the Palæozoic age of the strata. The overlying limestones, some 800 feet in thickness, hold the same or closely allied species. They are filled in certain zones with thick concretionary knots, lenses and reticulate masses of chert which may possibly yield microscopic forms of interest. No closer determination

of the age of these beds can be announced until the specimens have been examined in Ottawa. Topographically, the heavy limestone is the most important member of the series; it has a tendency to form strong ridges, scarps or bluffs, wherever it crops out in the belt.

Folds.

This limestone composes the summit, 6,500 feet above the sea, of the so called Black mountain (really whitish), a conspicuous peak between Slesse and Tamihy creeks. With the underlying shales and green metamorphics, it has been flexed into a rather regular S-shaped fold similar to an Appalachian zigzag. The pitch of the axes is directed due east. The nose of the anticline is found at the point where Slesse creek empties into the Chilliwack and the river flows westward for some nine miles in the unroofed anticline. The unexpected discovery of such an axial direction for these great folds may throw some light on the determining cause for the east and west course of the broad Fraser valley from Hope to the sea.

Faults.

The northern limb of the anticline composes part of the thick monoclinal series described by Bauerman in his section up the river. The remainder of the section is made up of the same shales and limestones repeated some four times by north-west and south-east step-faults with downthrows to the south-west. Abundant large crinoidal stems, similar to those occurring on Black mountain were discovered in the crystalline limestone at Thurston's ranch opposite the mouth of Slesse creek. It was the five-fold occurrence of this thick, easily recognized bed which at length pointed to a series of parallel faults as responsible for the duplication of beds in the twenty-mile monocline of the river valley. Duplication by overthrown folds proved to be highly improbable. In some cases planes of slipping were actually seen. The great thickness of 24,000 feet, given to the series by Bauerman, is believed to be very much in excess of the real strength of the beds. A careful, close estimate cannot be made until the map is completed and observations are plotted, but the total thickness must be less than four thousand feet.

Indications of gold and silver.

A small patch of mineralized ferruginous schists and saccharoidal crystalline limestone was discovered in contact with intrusive granite in the extreme eastern portion of the belt. It is possible that they represent the altered equivalents of the Palæozoic beds above described. There are indications of the occurrence of both silver and gold east of Chilliwack lake, and that portion of the belt can be especially recommended for exploration by prospectors. Until our trails were this summer cut through to the lake, almost no prospecting had been done in the upper part of the valley. Through July and August, a few men advanced eastward beyond the granite, and also reported the

country to be worthy of close examination. The re-opening of the old Boundary Commission trail would make the latter possible. It is to be hoped that this tract, which is specially interesting to the geologist, will be rendered accessible next year by means of a suitable pack-trail.

Structures south of the Chilliwack river.

The long monoclinal section is confined almost entirely to the north side of the Chilliwack river. From that stream to the boundary line, the structures are more complex. The shales are represented by phyllites and slates, often impregnated to a remarkable degree with pyrite and other minerals; the sandstones are altered to quartzites and schists. All the sediments exhibit a degree of induration and mineralization much in excess of that displayed north of the river. This difference is to be explained partly by more intense local crumpling, and partly by the contact metamorphism of intrusives.

Eruptive rocks.

The shales and limestones are cut by a considerable number of eruptive rocks, all intrusive with the exception of an amygdaloidal lava which appears in small patches on the rugged peaks west of Tamihy creek. The latter rock, with associated tuffs, is possibly contemporaneous with the shales. The most important intrusive from the standpoint of area covered, is an extensively developed hornblende biotite granite, already noted by Bauerman, in the eastern part of the section. Its contacts were located throughout the area, and its intrusive character clearly proved. Its numerous basic segregations, the accompanying aplitic and lamprophyric dikes and metamorphic aureole well deserve detailed study. Quartz veins of good size are comparatively rare, either in the granite or in its contact zone, but coarse pegmatites are common there.

Occurrence of gold.

The granite is also intrusive into an irregular mass of variable diorite occurring between Sleese creek and the lake. The exomorphic zone of the diorite is still more interesting than that about the newer eruptive. Observation seems to show that the concentration of gold in the quartz leads, now being developed in the region, may be referred chiefly to that zone. Free gold in paying quantities, according to samples, has been found several miles from any visible granite contact, but never, to my knowledge, at any great distance from the intrusive diorite. Igneous dikes cutting the diorites, together with others among the sedimentary rocks of the belt, will be microscopically examined in Ottawa.

A few years ago, great excitement was created among mining men by the discovery of the 'Lone Jack' gold property on Red mountain, and about four miles south of the point where Slesse creek crosses

Mount Baker.

the boundary line. The net result has been to give the Mount Baker mining district a greater reputation than it at present deserves, if we may judge by the amount of production yet achieved. A small amount of free-milling high grade ore and a large quantity of low grade ore distributed in many narrow veins, is now in sight in the large number of claims staked off on the American side of the line. On the Canadian side, only one property, that of Mr. Pierce, already noted, is being developed with an annual expenditure greater than the assessment fee. Mr. Pierce's assays average over forty dollars to the ton of the free-milling metal. Not only has he a tolerably rich quartz lead, but his property includes an extensive belt of an interesting auriferous rock which I take to be an altered limestone. This rock will undergo detailed study in the laboratory. A further encouragement to Mr. Pierce's enterprise is an abundant supply of water-power on the ground. Numerous other claims were visited, but, either on account of the small quantity of ore in sight, or because of its low grade character, none of them seemed so promising as this one. The strongly mineralized rocks, such as appear in the vicinity of the 'Lone Jack' mine, extend but a short distance (from one to three miles) into Canada; we must, therefore, not expect many important discoveries of the precious metal within the ten-mile belt explored this season. A ten-feet bed of magnetic iron is reported to have been found at the close of the season on Red Mountain, a few hundred yards north of the line, but I had no opportnnity of reaching it in its remote position from any trail.

Plant bearing beds.

No stratified bed-rock formation later than the Palæozoic series appears in the belt except a small patch of coal-bearing shales, sandstones, grits and conglomerates, probably Cretaceous, occurring on Sumass mountain, and on the opposite ridges to the north and south of the Chilliwack river. The thickness is considerable—1,500 feet—but the area is small, not more than five or six square miles. A few fossil leaves were found *in situ*, and better specimens were presented to the Survey by Mr. D. G. Gray and Mr. M. McArdle. Mr. Gray is the manager of a boring plant which has already sunk one hole 530 feet deep in the search for coal and is continuing operations on the southeast side of Sumass Mountain. The thickest coal-bed known to me here measures thirty inches. The logs of the borings are not yet accessible to the Survey; they may show the presence of a heavier deposit. The quality of the coal is at least fair, as some of it has been successfully used for blacksmithing purposes. In this case, also, the exact age of the beds cannot be made out until the fossils have been determined, but the similarity to the Cretaceous rocks of Nanaimo is strong. The measures lie at the base of the series which has everywhere gentle

dips and repose unconformably on contorted gray quartzites and hard sandstones composing much of Sumass Mountain. The latter are cut by a fine-grained diorite which is associated, in the form of a remarkable flow-breccia, with a newer granite. The coal measures overlap the breccia.

Summary of bed-rock geology.

The following is a provisional summary in descending order of the different formations in the belt, the nomenclature of which must not, however, be considered as that which may be adopted in the fuller final report:

Glacial and recent deposits.
Cretaceous (?), plant-bearing beds with overlying beds conformable with them.
Intrusives of Sumass Mountain.
Fossiliferous Palæozoic beds with others conformable with, and underlying them.
Green quartzite series.
Vedder Mountain gneisses.

Ages of dykes.

The ages of the large number of dykes in the area and of the intrusive granite and diorite of the mountain tract, are not yet known with a degree of confidence that would warrant their assignment to definite geological epochs. Using only the information to be derived from this particular region, they are to be referred to the long interval between the Palæozoic stage represented and the glacial period. The bearing of the facts ascertained by field-study this season on the question of dates of the various epochs of mountain-building in this part of the Coast range, will be discussed in the final report.

The Boundary Creek District, British Columbia.

Mr. R. W. Brock.

Start for field.

The winter and early part of the summer were spent in Heidelberg, Germany, in studying, microscopically, rocks collected during preceding seasons in West Kootenay, B.C. On returning, I reached Ottawa on August 9, but was delayed until the 12th in getting the necessary supplies for field-work. On this date I left Ottawa with instructions to extend the work into the Okanagan map-sheet from the western border of the West Kootenay sheet, where work was left off last season. Mr. Leach, who had charge of the topographical work in West Kootenay, having been transferred to the coal-fields of the Crow's Nest Pass, I was this season without a topographer, and progress in the work was necessarily slower.

Areas examined.

Greenwood was selected as headquarters and work was confined to portions of the Grand Forks and Kettle river mining divisions of the Boundary district. Commencing field-work at Grand Forks, Hardy creek was ascended to Hardy mountain, and the country between July creek and the North Fork of the Kettle river to the international boundary line was examined. From here the work was extended northward to Summit camp. From this point the area between Brown creek and the North Fork was examined. Moving southward, the district between July creek and Boundary creek was examined a short distance south of Wellington camp. From Wellington camp, July creek was descended and camp was moved to Grand Forks. From Grand Forks, a trip was made up the main North Fork of the Kettle river, to examine the rocks in which coal had recently been discovered.

On returning to Grand Forks, work was extended from July creek to Boundary creek, south of Wellington camps, to the boundary line, including Central and Attwood's camps. A traverse was then made of the Columbia and Western railway, between Midway and Grand Forks, the railway cuttings affording fine exposures of the rocks of the district. Ordinary field-work was suspended on October 23, the remainder of the season being devoted to an investigation of the ore-bodies of the district examined, together with some of the representative ores of Deadwood and Copper camps. I returned to Ottawa on November 13.

Physical features.

The district between the North Fork of the Kettle river and the main stream south of Pass creek, while mountainous, is lower, less rugged and more open than the country to the east. The mountains take the form of comparatively even rounded ridges, scarcely exceeding 5,000 feet in height, often with broad summits and rather gentle slopes. The northern slopes, where they have escaped forest fires, are always well wooded, and the eastern slopes generally so. Southern slopes, as a rule, are open and grassy, and the western, either grassy or park-like. To a large extent the country is drift-covered, with knees and elbows of rock protruding. North of Pass creek the mountains are higher, rising in pyramidal peaks to a height of about 7,500 feet, and the country is less open and more rugged.

The climate is drier than that of West Kootenay. This, with the lower altitude of the mountains, the consequent lighter snowfall and more rapid melting in the spring, makes the water supply less copious and reliable, although the district is still fairly well watered. The valleys, as a rule, are large and wide, affording, in a number of instances, good ranching lands. The valley of the main North Fork, as far as the junction of the East Branch, was described in the

Summary Report of last year. From this fork northward the valley is narrow and for the most part V-shaped, but widening at intervals with a small flat or swamp in the river bottom. July creek has a short deep valley with an even gradient.

Boundary creek occupies the principal longitudinal valley between the North Fork and the main Kettle river. Along its lower stretch it is a wide U-shaped valley, with good grazing land on its lower slopes. The transverse valleys are short and steep but still larger and older looking than the corresponding valleys in West Kootenay. The topography, as a whole, is that of an older mountain district.

Timber.

Most of the valleys are or have been well wooded. The timber of the North Fork is the largest and most valuable, both for mining and building purposes. The vegetation is similar to that of West Kootenay outlined in the last Summary Report. The open hillsides are usually clothed with bunch-grass, and sage-brush was observed at one or two localities.

Geoligical description.

Although this district may be traversed with less difficulty than West Kootenay, geological work is not much easier, as the covering of drift in many places conceals the rocks and good exposures are found with difficulty, if at all. Frequently the critical points, such as contacts, are entirely drift-covered. While prospect pits are usually to be found, these are not altogether satisfactory for geological purposes, for mineralization obscures the original structure, as it alters the original character of the rocks. After a few words on the nature and distribution of the rocks, a short account of the occurrence of ores in them will be given. As in the Kootenay district, the geology is complex and diversified.

Rocks observed.

Eruptive rocks (greenstones, granites, various intrusive dykes, tuffs and lavas, etc.) have the widest distribution. Sedimentary rocks, such as limestone, generally crystalline, argillites, quartzites, together with metamorphic rocks including serpentines, are met with in almost all parts of the district, but do not have very large dimensions in any one place, being caught up as inclusions in the intrusive eruptive rocks. The oldest rocks recognized in the district are the sedimentary and crystalline rocks.

Crystalline schists.

On Observation mountain near Grand Forks and on the rounded hill a little south of west of this and some of the hill-sides on Newby's ranch, are crystalline mica and hornblende schist with a few bands of crystalline limestone. These highly altered rocks resemble lithologically the rocks of the Shuswap series (Archæan), but may only be the argillites and limestones found elsewhere, in a more metamorphosed form.

Sedimentary rocks.

The argillites, in places altered to schists and hornfels, limestone, usually crystalline, often highly so, quartzite, the latter occurring only sparingly, together with serpentine which occurs in many portions of the district associated with these, form a series which closely resembles the Cache creek series described by Dr. Dawson* and assigned by him to the Carboniferous. In the Boundary creek sedimentary rocks no fossils have been found, but they are probably of about the same age as similar rocks occurring to the north and west, and may, on this ground, be provisionally classed as Carboniferous. Owing to this mode of occurrence their strike is not uniform. It may be in any direction but most frequently perhaps it approaches north and south.

Greenstone.

Somewhat newer than the sedimentary rocks, but probably with no very great lapse of time intervening, are the greenstones, which have the greatest development of all the rocks in the southern portion of the area examined. These rocks in the district under discussion appear much altered. When the structure can be plainly seen it seems to be an augite-porphyrite, similar to that found in so many portions of the West Kootenay district. In many places it, like the West Kootenay rock, appears to be an agglomerate. Usually it is massive, but under pressure it has in places become more or less schistose, and difficult or impossible to distinguish microscopically from some of the included argillites. It cuts and holds inclusions of the older sedimentary rocks. Indeed, in most of their occurrences, these latter appear simply as islands of greater or less size, caught up in this greenstone. In places, particularly near a contact with limestone, it is almost filled with small fragments of the rocks through which it has cut.

Occurring with it, as at Summit City on the east road to Eholt and at Phoenix are areas of a tuff-like rock. The material is green, resembling the porphyrite, the fragments, which are usually angular often with protruding corners, are of limestone (crystalline) cherty quartz, red and black argillite, and are usually tumultuously arranged. They vary greatly in amount and size. Sometimes they form almost the entire rock. In these rocks are fine-grained bands resembling volcanic ash. Before these rocks have been studied microscopically it is impossible to draw a line between the greenstone filled with inclusions of the older rock and these bands of apparent tuffs. At one or two points, such as near Mile-post 72 on the Columbia and Western railroad, is a massive looking rock, full of pebble-like fragments which might prove when studied microscopically to be an associated conglomerate. Whilst, therefore, at some points there is doubt as to the

* Annual Report, Geol. Surv. Can., vol. VII., (N.S.), Part B, pp. 37-49.

nature of the 'pudding-stone' like rock, at most points it is probably greenstone filled with inclusions, with, in places, associated tuffs.

Gray granite.

Newer than and cutting the greenstone is a gray hornblende-biotite-granite which has an important development on Boundary creek at Greenwood. Small intrusions of it occur in Wellington camp and on Hardy mountain. Near its contact with the greenstone and where its mass is small it is often coarse-grained, more basic, (as if it had absorbed basic material from the older rock) and inclined to be pegmatitic. Owing to differentiation, facies of this rock also occur which are not, strictly speaking, granite. Granite porphyry dykes from it cut the older rocks for a considerable distance from the parent masses. A crushed porphyry dyke on the south fork of McCarren creek and at Central and Attwood camp may belong to this series of dykes. It will probably prove to be the same rock as the Nelson granite of West Kootenay* and about Jurassic in age.

Younger granites.

Near Central camp are exposures of a gray monzonite-like rock and dykes of a similar rock occur in the gray granite near Greenwood and in the greenstone at the Ruby claim. Whether this rock is related to the Rossland monzonites and therefore newer than the gray granite, or whether only facies of the grey granite and its dykes, has yet to be determined. A pinkish acid granite newer than the gray and belonging to the rock largely exposed on the divide between the East Branch and the main North Fork of the Kettle river, occurs on the main North Fork of the Kettle river about 10 miles above the fork of the East branch. On the North fork of the Kettle river there also occurs a still newer rock, a reddish porphyritic granite similar in appearance to the Rossland granite.

Dyke rocks.

Dykes of a reddish or yellowish porphyry with a fine-grained granular ground-mass and rosette-like phenocrysts of feldspar, with some of biotite, are common, especially in the neighbourhood of ore deposits. On the Carbonates claim this reddish porphyry is seen as a contact facies of a coarse porphyry similar to those observed east of the North fork and in the Rossland district, where the dykes are from the Rossland granite. So it would appear that the porphyry dykes of the Boundary district hold the same genetic relationship, although it has yet to be proved that they have no connection with the recent Tertiary volcanic rocks. Besides the porphyry dykes are others of dark lamprophyric rocks and some of a dark brownish basalt-like rock. On account of their somewhat limited occurrence and the lack of exposures at critical points, the relative age of these rocks with respect to that of the porphyries could

*Summary Reports, 1896 to 1900.

not be determined, but from analogy of similar rocks in the Kootenay district one might expect them to prove to be newer.

Volcanic rocks.

The recent volcanic rocks occur in numerous localities as outliers, remnants of a sheet of volcanic rocks which once covered the entire country, but which have been largely eroded away. The series consists of coarse and fine tuffs and ash beds, some shales and sandstones in which coal is found in places, sheets of andesites, basalts, pitchstone, and probably other volcanic rocks. These volcanic rocks often have phenocrysts of feldspar and are locally known as 'birds-eye porphyry.' Similar rocks have been found and described by Dr. Dawson in the country to the west and are largely represented in the areas embraced in his Kamloops and Shuswap sheets. From stratigraphical and fossil evidences he assigned them to the Tertiary. A few fossil plants, which have not yet been determined, were found in these rocks on the North fork of the Kettle river.

Distribution of the rocks between July creek and the North Fork.

Owing to the intrusive nature of most of the rocks, their distribution is complex and only a small area need be examined to form the acquaintance of most of the rocks of the district. Without going into details their occurrence is roughly as follows: In the country lying between North fork and July creek the rock is mainly greenstone, but with several important and many minor inclusions of sedimentary rocks. Of the latter, limestone, which is usually crystalline, is the most important. Near Badina Hill at the southern end of the ridge, is a thin bedded quartzite. Here also the limestone is replaced by silica forming a cherty quartzite-like rock. Dr. Dawson mentions a similar rock as characteristic of the Cache creek (Carboniferous) formation.

A belt of crystalline limestone is fairly persistent on the range near July creek, passing west of Eagle mountain, Hardy mountain and the head of Deer creek. Limestone is also exposed in Summit camp almost to Mineral Monument XVIII. The band is not wide, and owing to coverings of drift it is impossible to prove that it forms one continuous band. Smaller bands are found at various other points along the railway line on the North fork of the Kettle river, at the head of Lime creek, on the ridge between the B.C. mine and Rathmullen creek and other points.

Argillites.

Argillites, more or less altered, occur in the greenstone on Hardy mountain, near the Majuba claim, and near them is a large mass of apparently very pure serpentine. To the north of these rocks is a 'stock' of the gray granite, very basic, holding inclusions of the greenstone and impregnating it.

Argillites occur near the mouth of Fisherman creek. They are black and in some parts appear to be highly carbonaceous. On the

Laurier claim, for example, is a prospect tunnel in a black coal-like rock, having the appearance in places of anthracite, but it is probable that it is highly silicious. On Hoffmann mountain, near the head of the East fork of July creek purplish argillites are caught up in the greenstone.

Volcanic rocks.

The summit of the range between Deer creek and Fisherman creek consists of the Tertiary volcanic series. Overlying the greenstone and associated rocks, are coarse and fine-grained tuffs, and above these are andesites and other volcanic rocks. The eastern portion of the range between Fisherman creek and Lime creek is also capped by this volcanic series. It extends southward almost to Fisherman creek. At their northern end, near Lime creek, these rocks are cut by a reddish porphyry, which becomes somewhat granitic in the centre of the mass. On the railroad, about a mile east of Eholt, is another exposure of the volcanic rocks. They extend north to Loon lake, westward to the hill across the B.C. wagon road, and east to about Rathmullen creek. On the railroad about a mile east from the edge of the volcanics are several large dykes of monzonite or essexite-like rock.

Rocks at Summit camp.

At Summit camp, on the Emma and Oro Denoro claims and extending north from the latter, is a small boss of gray granite. The hill to the north-east, on which is Mineral Monument XVIII., consists of a large basic dyke between limestone on the east and the greenstone on the west. It looks as if it might be a larger, coarser, more highly crystallized form of the dark basaltic dykes. The reddish and yellowish porphyry dykes are common about Summit camp, B.C. mine, Rathmullen, and other points where important mineralization has taken place. The basaltic dykes are frequently met with about Eagle mountain. Other dykes are found, but space can not be given for particulars regarding these in the present preliminary report. In the district between July and Boundary creeks the greenstone is still, perhaps, the dominant rock, but the areas of sedimentary rocks become more frequent and important, particularly on the Boundary creek slope, although they are still cut by and included in the eruptive rocks. Argillites, often highly altered, and the cherty altered limestone are common, but so mixed are the rocks in this area that it is impossible to give the occurrences of the rocks without going into a detailed description of the whole district.

Rocks between July and Boundary creeks.

Greenstones.

In Phœnix camp, north of the town, is the greenstone filled with inclusions, or the greenstone tuff, bands of limestone with some argillites, dykes of gray granite and porphyry. To the south of the town the greenstone and greenstone tuff is more massive, having fewer inclusions of the sedimentary rocks. Near the station and on the hill

to the north-east, and on the ridge above the Gold Drift, the tertiary volcanic rocks overlie the older formation. In Wellington camp, on the Winnipeg claim and on the hill north-east, a mass of the gray granitic rock cuts up through the greenstone. A large inclusion of serpentine is also found here. On the wagon road toward the Athelstan claim a band of yellowish or brown weathering rock, locally known as dolomite is encountered, which extends through claims north-east and south-west. This rock, while made up of a certain amount of calcium and magnesium carbonates with some iron, is somewhat silicious and has probably been formed from serpentine. May creek and the head of McCarren creek are in massive greenstone.

In Central camp and on the ridge where No. 7 mine is situated, are considerable areas of more or less altered argillites. In Central camp serpentine is also largely represented. In places the latter is altered to a yellowish rock resembling that found near the Althelstan claim. Squeezed and altered dykes of granite porphyry are also common, together with masses of the monzonite-like rock. Similar mixtures of greenstone, argiliites, limestone, serpentine, together with the numerous dykes are found on the slopes near Boundary creek. Around Midway, extending around the boundary line for a couple of miles, and northward across Norwegian creek to McCarren creek and west of Boundary creek to about Boundary falls is an important development of the Tertiary volcanic series.

Rocks on Boundary creek.

On Boundary creek, beginning at Anaconda and extending to the railway bridge above Greenwood is a mass of the gray granite. From Anaconda, the eastern boundary of the granite runs north-easterly to the Last Chance and Lake claims and then north-west to the mouth of Providence creek. The hills to the west of Boundary creek between these points are gray granite. This granite is found along the north side of Eholt creek to about Mile Post 84 on the railroad, and here greenstone reappears.

West of the North Fork between Brown's and Pass creeks the rock is essentially greenstone, but much cut up by porphyry and other dykes. From Pass creek north to a point opposite Rock Slide creek, the red granite obtains. Between this point and the forks of the river at Bunch Grass mountain, the west side of the river has not yet been examined. On the main North fork, above the forks of the East branch, gray granite predominates for the first six miles though extensively cut by pink acid granite and porphyry dykes from the red granite. Some red granite comes in above this point, but the main rock from here to the Coal Fields camp (about twenty-four miles by trail from Bunch Grass hill) is the pink acid granite. At the creek

from the west, half a mile below Coal Fields camp, the Tertiary volcanic series comes in and extends to the camp. The rock exposed by the river cutting east of and opposite to the camp and for about one mile north is the acid micaceous granite. Here the volcanics are again exposed near the river for at least one mile. On the west bank of the river, the volcanic series, including the tuffs and shales, seems continuous. The main portion of the divide between the East Branch and the main North Fork is granite, and it is not probable that the area of Terteary rocks will be found to have a strong development east of the main river nor for any great distance up the stream.

Glaciation.

None of the mountains in the area examined, are of sufficient altitude to support glaciers or snow-fields. But here, as elsewhere in Southern British Columbia, glacial phenomena due to the former Cordilleran glacier are everywhere strikingly evident. The rocks when protected from weathering are polished, striated and fluted. The average direction of striation, where uninfluenced by local causes is about S. 30° E. Transported boulders, often of large dimensions, occur scattered all over on the summits and ridges, as well as on the lower levels. Boulder clays are not common but re-sorted glacial material, such as silts and clays, is abundant. This drift material, when it occurs in a protected position, shows marked and persistent terracing. The terraces are very numerous, rising in tiers at intervals of from ten to one hundred feet to a height of about two thousand feet above the valleys. In the larger valleys, such as that of Boundary creek, the numerous terraces are a marked feature in the landscape. A detailed study of these terraces, with those already observed in West Kootenay and the Kamloops and Shuswap districts, would yield very interesting results. The glacial phenomena in this district are in accord with those observed in other portions of the west once covered by the great Cordilleran ice-sheet.

Ore-bodies of Boundary creek district.

The ore-bodies of the Boundary district are, for the most part, large in size and low in grade. This is their striking characteristic. Development work has proved them to be much larger than at first supposed, and they have proved to be surprisingly well adapted for smelting, no fluxing or roasting being necessary, but on the other hand the values have proved lower than the assays from early samples had indicated. In many respects these ore-bodies resemble the ore-bodies of West Kootenay. They are in what are sometimes known as composite or shear zone veins, formed by mineralizing solutions traversing the country rock, principally along fissures or zones of fissures, in which they deposit the economic minerals, and from which they replace with their mineral contents, particle by particle, sometimes only

partially, sometimes completely, the original material of the country rock.

Their form.

As might be inferred from their mode of formation, they resemble the West Kootenay bodies in being of irregular form, often with no well-defined walls. The country rock in the neighbourhood being mineralized to a greater or less distance from the ore body, the line between the two is often merely a commercial wall. As in the Kootenay the ore occurs in the veins in shoots of various forms. Sometimes several of these occur, often roughly parallel. Sometimes veins with similar filling cross one another at various angles, and small stringers leading from the main vein are of common occurrence. The intersection of veins, so far as observed, while sometimes increasing the size, has produced no marked enrichment in the ore body. The ore occurs in all rocks except the newest, the latter being the porphyry and basic dykes, the acid granite, the red granite and the Tertiary volcanic rocks.

Country-rock.

So far as yet found mineralization is confined to districts which show evidences of recent disturbance, especially where the older rocks are cut by the newer dykes. Limestone, in such a district, seems favourable for the deposition of ores. In some cases the ore occurs in the limestone itself, but more frequently it is found in a rock along its contact with limestone, the limestone forming a clean-cut wall to the deposit. Thus in the greenstone, where the latter holds large inclusions of limestone, the ore occurs in the greenstone along its contact with the limestone, while the latter may show little or no mineralization.

Causes of mineralization.

The lack of mineralization of the limestone itself in such cases is due to the fact that under pressure the limestone, instead of fracturing, flows and forms lenticular masses, which furnish no channels for the mineralizing solutions. If attacked and replaced by them it must be along the contacts, and from the pureness of the limestone this will take place easily, leaving a clean-cut unmineralized wall. That the contacts between the limestone and other rocks should be favourable, may in part be due to the chemical influence of the limestone in precipitating the mineral contents of the mineralizing solutions, but it is also due to lack of firm cementing between the limestone and contact rock, thus leaving a free channel, which the solutions have used as a highway and basis for their operations. But while such contacts are favourable, mineralization is by no means confined to them, in fact in the largest deposit yet found in the district (Knob Hill, Ironsides), with the exception of an insignificant island of it in the intermediate level, limestone is conspicuously absent, although it occurs at numerous unmineralized points in this vicinity. While most of the deposits of ore are in greenstone, limestone, or in contacts between them, they also occur

in the other older rocks, notably in the serpentine, argillites and gray granite.

Relationship between the dykes and ore-bodies.

The porphyry dykes which are associated with the ore-bodies, are usually to be found in close proximity to the ores, sometimes, as at the No. 7 mine, the ore occurs parallel to the dyke along the contact, or in the immediate neighbourhood. At the B. C. mine, Mother Lode mine and others, the dykes lie almost horizontal, running through the ore-body and intersecting it at right angles. The ore is found on both sides of the dykes, but, as far as known, it is not faulted by them, nor is the ore in any way altered by them, as might be expected if the dykes were newer and had been erupted through the ore, but in some cases the ore seems richer in the neighbourhood of the dykes.

That the dykes themselves show so little signs of mineralization and that the salband extends unbroken across the contact with the ore cannot be taken as proving that the dykes are subsequent to the ore formation, for the same phenomena are observable in West Kootenay where such dykes are known to be prior. If this is also the case in the Boundary district, the mineralization in such cases has taken place along fractured zones or fissures or contacts joining parallel dykes of porphyry. If mineralization has taken place in this way and a genetic relationship exists between the porphyry and ore (which in the Boundary district cannot be taken as yet proved) it would account for the enormous dimensions of the ore bodies. In the Mother Lode mine, where these conditions are found, development work, so far, has exposed an ore-body 1,180 feet long, 180 feet wide and 500 feet in depth.

Size of ore-bodies.

The Knob Hill, Ironsides lead, is of as yet unknown dimensions. It extends through the greater part of the length of both claims and probably into the Gray Eagles, the lowest slopes being 700 feet below the highest point of the vein, and diamond drilling has proved the vein to a depth of 800 feet. Its known width is said to be 400 feet. On the second level, three ore shoots are said to occur, one of 150 feet, one of 100 feet and a third of 200 feet in width. These with the mineralized rock between the shoots would make a total width of 800 feet. One stope said to be 100 feet by 200 feet, is all in ore. While the above figures may be only approximately correct, they are sufficient to show the extent of mineralization. Some of the less developed properties also have very large ore bodies. There has been considerable movement since the ore was deposited, numerous slips often with gangue or with secondary filling traverse the ore bodies. This broken nature of the ground, coupled with the original irregularity in the form of the ore-body makes the exploitation of the smaller masses difficult and precarious. The slips so far encountered have not been sufficiently

large to have seriously affected the greater ore bodies. The serpentine is particularly full of slips, some prior but many subsequent to the formation of the ore bodies, which make it probably the most unsatisfactory country rock in the district.

Mineral contents of the veins.

The mineral contents of the veins, arranged according to their prominence, are magnetite, pyrrhotite, chalcopyrite or marcasite, arsenopyrite, specularite (micaceous hematite); galena, zincblende and molybdenite occasionally occur, especially in the smaller veins. Tetrahedrite, ruby silver, argentite, native silver, native copper and the various oxydized copper minerals are reported from a few localities, for the most part in the smaller veins. When the ores consist largely of pyrrhotite and chalcopyrite they resemble some of the west Kootenay ores. The occurrence of large masses of magnetite in the ores is peculiar. It seems to take the place of the pyrrhotite, for so far as I could observe, where magnetite is prominent, pyrrhotite is absent, though in one or two cases it was present but only very sparingly. The pyrrhotite and magnetite appear to have been the first minerals of the ores to be deposited, though their period of formation extended into the period at which chalcopyrite and pyrite were formed. This is shown by the fact that while the latter are usually found as veinlets or small points or irregular masses scattered through this pyrrohotite and magnetite, they also occur in places interbanded with them.

Formation of magnetite.

The reason for the formation of magnetite in this manner would seem to be a deficiency in sulphur in the mineralizing solutions. That they were poor in sulphur is shown by the formation of pyrrhotite rather than a higher sulphide of iron. Where magnetite occurs they would appear to have been still poorer; the greater part of the iron could not obtain sulphur, all available sulphur being first seized upon by the copper, the remaining sulphur which the iron obtained being only sufficient to furnish the chalcopyrite. Oxygen would also be scarce, so hematite could not be formed and the iron appeared as magnetite. Later when the copper had been supplied the little iron remaining received enough sulphur to form pyrite. In some places the double sulphide of iron appears to be marcasite, being ghter in colour and more easily decomposed, leaving a cellular structure, but no crystals of marcasite have been seen. Arsenopyrite occurs only at one or two points, as in the Winnipeg and Morrison mines, and not in any great quantity. The specular iron which occurs in scales, often rosette in form, appears to be an oxydation product from the magnetite. It does not occur in very great quantity.

Gangue minerals.

Quartz and calcite are the common gangue minerals. Magnetite may often be considered to also play this role. Garnet, green and red

(probably hessonite and almandine) and epidote, both well crystallized and massive, are very abundant in the veins often interbanded with the ores They are probably largely alteration products of the country rock. This process can be observed at many points in all stages of development. The garnet and epidote are not confined to limestone, but are also abundant when greenstone and gray granite are the country rock. In the Mother Lode mine, where limestone seems to be the country rock, while these minerals are developed, the chief mass of the altered rock is made up of felt-like aggregates of short fibres, apparently actinolite. Silicification of the country rock to a cherty or quartzite-like material is a common phenomenon in the neighbourhood of a vein.

In the large deposits the values are principally in copper and gold with subordinate silver. In some of the small quartz veins carrying galena, zincblende, with tetrahedrite and silver minerals, silver is the principal value; in others, as No. 7, when pyrite likewise occurs, gold is also of economic importance, the galena and blende carrying silver and the pyrite gold. In the large deposits, further study is required in order to formulate the laws governing the distribution of the gold values. Generally the magnetite and pyrrhotite, when occurring alone, are almost barren of gold, but this is not always the case. On the Seattle claim the pure magnetite is said to carry good gold values. Specimens for assay have been taken to test this. What appears to be pure pyrrhotite in the Winnipeg carries as high gold values as have been obtained in the mine, but at other points in the same mine the pyrrhotite appears barren. As a general rule throughout the district the best values occur when the pyrrhotite or magnetite are mixed with chalcopyrite. An increase in the amount of copper seems occasionally to lessen the value of gold. This obtains in the Mother Lode, where about two per cent copper carries the highest gold values, but in the British Columbia mine on the other hand the values seem to be confined to the chalcopyrite; pyrrhotite and pyrite appearing to be almost barren. The chalcopyrite although segregated in places, is, on the whole, remarkably evenly distributed through the large ore bodies. Away from the chief centres of mineralization, although pyrrhotite or magnetite are sometimes found in considerable masses, gold and copper appear to be only sparingly present. Values.

The actual value per ton and the cost of mining and smelting have not been made public. The values are low, but the cost of smelting is also low and the management state that the mines are at present working on a paying basis. It is generally admitted, that many of the properties can only be worked profitably by the compa-

nies owning their own smelter. For this reason a union of the smaller properties, or at least the building of a union smelter, is being agitated. The larger properties, such as Knob Hill, Ironsides and Mother Lode, are now mining by large quarries or 'Glory holes,' from which the material will be loaded directly into ore cars. On the Knob Hill, this will be done by a steam shovel. On the Mother Lode, the large blocks will be first put through a gigantic crusher capable of manipulating a block a yard square and with a daily capacity of 800 tons. With this cheapening of the costs of mining and with double smelting capacity, which will be ready shortly, in both the Greenwood and Granby smelters, there should be an appreciable increase in the profits. The small quartz veins are said to yield high assays in places, but of these, the No. 7 vein was the only one being mined at the time of my visit. This ore probably runs from $12 to $15 per ton.

Lack of surface oxydation.

A striking feature of these deposits is the lack of surface oxidation. A few feet below the surface, the ore has the same character as exhibited in depth. The soil overlying the deposit is often quite unstained, affording no indication of the underlying deposit, and consequently adding to the difficulties of prospecting. Often the surface of ore even retains the glacial polishing. The explanation of this feature is probably to be found in the glaciation to which this region has been subjected. The old oxidized and probably enriched surface has been cut off by the Cordilleran glacier, and since glaciation, the surface has in great measure been protected.

Ores of Copper camp.

An apparently and at first sight different type of deposit occurs in Copper camp, of which the King Solomon affords the bsst example. This deposit is found at a contact between porphyry and crystalline limestone. Wedge-shape little tongues of the porphyry extend from the main dyke into the limestone. Both the limestone and the porphyry are much broken up and traversed by little slips. The fractures cut the limestone into little blocks. In the fractures in the limestone, and to a less extent in the fractures in the porphyry near the contact, are depositcd various oxidation products of iron and copper and also native copper. These little blocks of limestone include red earthy hematite and yellow limonite, crystallized and massive malachite and azurite, a black amorphous substance probably a mixture of copper oxide and perhaps amorphous chalcosite, cuprite, often well crystallized in transparent crystals, native copper, chrysocolla, and the impure chrysocolla known as copper pitchblende. The edges of the little limestone blocks have often been dissolved and the copper ores then occur as encrustations surrounding a core of limestone. The main fissures are filled with the hematite and all the copper minerals; the smaller

fractures principally with the copper. In the porphyry it is only the fractures which contain a thin film of the copper ores, the rock itself remaining fresh and unaltered.

About 650 feet north of the main working on the King Solomon is a small vein. The rock here is not so badly shattered. A few feet below the surface pyrite and chalcopyrite occur, although on the surface they have oxydized to sulphates and from the sulphates the green and blue carbonates of copper have been formed. What can be seen taking place on a small scale on this little vein is probably what occurred on the King Solomon ledge proper, on a much larger scale, so that the King Solomon is probably an oxydized and secondarily enriched form of a sulphide deposit similar to the other sulphide deposits of the Boundary district and due to oxydation and concentration by surface waters. The iron of the iron sulphides has been removed or left as red hematite or yellow limonite, the copper has been more or less concentrated as carbonates, oxides and native copper, probably black sulphide and other copper minerals. At a greater depth, the unaltered iron and copper sulphides will presumably be found, although between the oxydized minerals and unaltered sulphides it is quite probable that a zone of enriched sulphides will be met with. That this zone of oxydation and enrichment should be found in Copper camp and not in other parts of the district, is in part explained by the local topography and the broken nature of the country rock, but a cap of volcanic rocks which covers the hilltops all around and extends almost to the King Solomon ledge, has been, in all probability, a factor. This capping in glacial times is likely to have extended a little farther, in which case it would have protected the deposit from the scouring effects of the ice-sheet which has been shown above to have covered this area. Again the contact between these volcanic rocks and the older rocks is likely to be a natural water-way.

Chemical changes.

Some of the practical deductions from the study of the ore deposits may be summarized as follows:—

Since, with the exception of certain deposits in Copper camp there is no zone of oxydation and secondary enrichment in these deposits, no loss of values is to be expected in depth, while the present general conditions remain unchanged. On account of the irregular form of the ore-bodies and the complex nature of the rock-formation, a careful and detailed geological study of the ground in the neighbourhood of the mine would be of great practical value in the exploitation of the ore bodies.

Practical deductions from a study of the deposits.

For the same reason development work must always be kept well ahead of the actual mining. Crosscutting must frequently be done to

determine the limits of the ore-body and to prove the existence or non-existence of parallel ore shoots. What appears a barren wall may often prove a barren zone between two ore shoots. The limits of the mineralization must be actually proved ; and similarly only that ore can be reckoned on which has been actually blocked out.

Diamond drilling.

Diamond drilling can with advantage be used for prospecting and exploiting the ore-bodies. Magnetic surveys would also be of great value in locating them under the covering of drift, and also in testing for masses of ore in the mine workings themselves. Especially would this be the case in the magnetite deposits. In pyrrhotite deposits also, in other parts of the world, magnetic methods have proved successful. The pyrrhotite and magnetite should always be assayed, as barren looking material sometimes carries good pay values. The conditions where pay ore occurs, and the minerals in the ore should be carefully studied with the view of ascertaining which carry the values and what are the causes which produce the enrichment. The limestone contacts in mineralized districts should be carefully prospected. The limestone wall can often be used for following the ore, it being kept in mind that the ore does not always strictly follow the limestone contact, and that this rock may pinch out without causing the ore to likewise give out.

Districts which show evidences of disturbance through vulcanism manifested by heavy dyking are promising fields for prospecting. The porphyry dykes themselves may in places prove auriferous, as in twelve assays of porphyry dykes from West Kootenay, one-half yielded colours of gold. In a specimen of a dyke from Valkyr mountains examined last winter, free gold was visible even with the naked eye.

Mines at present working.

Besides ordinary prospecting, fourteen properties were being worked in the Boundary district at the end of the season, and of these ten were shipping ore. In Deadwood camp, the Mother Lode, Sunset and Morrison were working, the two former shipping ore. Some ore was also being shipped from the King Solomon in Copper camp, but work on the claim was at a standstill. In Greenwood camp, the Knob Hill Ironsides group was shipping heavily, and some work was being done on the Lake mine. The Brooklyn has just been closed down, in response to an order from head-quarters in Toronto, althongh the mine was reported to be looking promising. In Wellington camp, the Snowshoe was being developed and sending out small shipments. This was also the case with the Winnipeg. Work was also being resumed in the Golden Crown. The Athleston was closed down. In Summit camp the B. C. was working and shipping, but the R. Bell, Rathmullen, Oro Denoro and other properties were closed down.

On the North Fork of the Kettle river the Humming Bird was being worked on a lease and was making occasional shipments. The Jewel in Long Lake camp (which was not visited) was shipping. No. 7 mine in Attwood's camp was working and shipping. In Central camp the City of Paris, which shipped during the winter, was closed down, but it is expected that work will be resumed in the spring. Some development work was in progress at the Ruby in Smith's camp. In other parts of the district prospecting was being carried on. This is the case in the district south of Summit camp between July creek and the North Fork. In this area, while mineralization has taken place at a number of places, no large deposit of pay ore has as yet been encountered, although a fair showing of ore occurs on the Little Betts and Seattle claims.

As an indication of the progress of mining in the Boundary district the shipments of ore for the month of October might be quoted :—

	Tons
Old Irosides and Knob Hill group	20,722
Mother Lode mine	8,730
B. C. mine	3,750
King Solmon	490
Snowshoe	330
Jewel	290
Winnipeg	190
No. 7	120
Sunset	50
Total	34,762

The total ore shipments for the year will approximate 385,000 tons.

Smelters.

The Granby smelter at Grand Forks has been working steadily since it was blown in a year ago. It has at present a daily capacity of about 670 tons. Two new furnaces to double its capacity are being added and are expected to be ready to blow in at the beginning of the new year. A converting plant to refine the math to blister copper was also being installed. With the completion of the railroad from Republic, Wash., it is expected that a large quantity of Republic ore will be treated at Grand Forks. The mines of the Granby Company at Phoenix can easily supply the enlarged smelter, as their output is practically limited only by the smelting facilities. The British Columbia Copper Co.'s smelter at Greenwood has also been running steadily with a daily output of about four hundred tons. Another furnace to double its capacity is also being installed. The Pyrite smelter at Boundary falls has remained idle since its completion.

North Fork coal.

Last summer a prospector, acting on information from the writer that Tertiary rocks occurring in the neighbourhood were likely to be coal-bearing, prospected new ground on the main branch of the North Fork of the Kettle river, which resulted in the locating of a small seam of coal. Following his lead a large number of claims have been staked but of these only a limited number cover coal-bearing rocks, the remainder being in granite. The New Coal Fields, as they are locally called, are situated about twenty-four miles above the forks of the East Branch on the main North Fork of the Kettle river, or about fifty-two miles from Grand Forks. Here, as above mentioned, a Tertiary outlier lies on the granite. The Tertiary rocks consist of tuffs, ash rocks, and a little shale overlaid by basalts and other volcanic rocks. The first exposure of coal on the west bank of the river occurs in a coarse tuff filled with fragments of volcanic rocks, and crystals of minerals belonging to volcanic rocks. Above this tuff is a thick bed of another filled with boulders from the granite of the surrounding country. In the tuff are little lenses of carbonaceous material, the remains of plants of which the form is sometimes preserved, and a thin seam (about an inch) of argillaceous material and coal. The tuffs have been somewhat squeezed. The strike is about N. 20° E., angle of dip 45° W.

Wiseman's discovery.

About one mile and a quarter up the river on the east bank is Wiseman's discovery. Here a band of shale twelve feet thick lies between two big beds of tuff. Interbanded with the shale are one or two thin ash beds. The shales are exposed for about 200 feet along the river bank. Their strike is S. 19° to 34° W., dip 30° to 40° E. At the upper end of the exposure the shales are contorted, and at this point the coal is found. The pressure has broken the seam and probably increased its width. At the widest point it approximates one foot. Only about twelve feet of the seam are exposed, but as the upper end disappears under drift nothing could be ascertained of its extension in that direction. The extent of coal-bearing rocks is not large as they are overlaid by the unproductive volcanic flows and immediately underlaid by granite which is exposed on the east bank for the greater part of the distance between the two exposures of coal. Nor have they a wide areal extension, as the granite boulders in the river and tributary creeks testify. All the divide between the main North Fork and the East Branch is granite. No work had been done on any of the claims at the time of visit, and the trail to the fields was not completed. This, coupled with bad weather and lack of provisions, prevented a careful examination of the whole Tertiary area.

Colonel N. E. Linsley, of Spokane, who examined the district after my visit, reports having discovered four seams of coal on the lower (Gilpin's) claim. Of these the upper (seven inches wide) was the largest

and was separated from the lowest by 150 feet of tuffs. He also found the area of coal basic rock to be extremely circumscribed. The coal is of very fair quality, coking easily and well.

Possibility of the occurrence of platinum.

The recent increase in the use of platinum has created a strong demand for this metal, and it is now as valuable as gold. Its principal source is in alluvial sands where it occurs with garnet, magnetite, gold and other heavy minerals. As sand it is sometimes very fine and of a brown or lead color. Treated with nitric acid it shows a white colour. It has been found in the Similkameen district and is known to occur at many points in the Western States. When found in place it has been principally confined to serpentine, and when found in sands it is usually in the neighborhood of serpentine. Consequently streams draining masses of serpentine, in particular should be prospected for platinum. Serpentine, as above noted occurs at a number of points in the district examined this summer, as on July Creek, Hardy Mountain and Central Camp. It also occurs on the range east of Cascade.

In conclusion I wish to thank the mine managers one and all for their unfailing courtesy, attention and assistance.

Crows Nest Coal Fields.

Mr. W. W. Leach.

Work by Mr. W. W. Leach.

On June 3, I left Ottawa with instructions to continue the examination of the Crow's Nest Pass Coal-fields, begun by Mr. McEvoy last year. Mr. T. C. Denis, B.A.Sc., accompanied me during the season. I returned to Ottawa on October 24.

Assistance by Mr. McEvoy.

On arriving at Fernie, some days were spent in becoming acquainted with the Cretaceous coal-bearing rocks of that neighbourhood. Mr. McEvoy, formerly of this department and now with the Crows Nest Pass Coal Company, very kindly accompanied us on several expeditions into the surrounding hills, assisting us very materially with his knowledge of these rocks, gained during the previous season.

On June 15, instructions were received to examine immediately two reported outlying coal areas, separate from the main or Crows Nest area, or such parts of them, that, being included in the lands earned by the Canadian Pacific Railway Company, might be taken into account when the selection of Government coal lands was made.

Of these two areas, the Northern or Green hills area was mentioned by Dr. Dawson in his report on 'that portion of the Rocky Mountains between latitudes 49° and 51° 30′ (see Annual Report, 1885, vol. I., page 109 B.); while the southern one was reported to Mr. McEvoy last year by Mr. Phillips of Tobacco Plains. It was considered advisable to examine the Northern area first, it being the more easy of access at that early season. Considerable difficulty was experienced in reaching the field of operations; the trail, following the valley of the Elk river, then in flood, being under water in many places.

This area is situated on the east side of the Elk river, the southern edge of it being about twenty-four miles above the mouth of Michel creek. It extends northwards an unknown distance.

Green Hills coal area.

Generally speaking the altitude of the Cretaceous rocks of this locality is that of a wide, flat syncline, the upturned edges resting conformably on the flanks of two high limestone ranges of Devono-Carboniferous age, one on the west side of the Elk river and the other on the east side of Fording river.

In that part of the area examined, the upper beds of the Cretaceous rocks, represented in the Crows Nest area by coarse sandstones, conglomerates and brownish and yellowish shales, have been entirely eroded away and with them some of the coal measures, but further to the north it is probable that these upper beds will be represented at least partially. The coal-bearing lands, within the boundaries of lot 4,588, group I., (the property of the Canadian Pacific Railway Company), are, roughly speaking, of triangular shape, about $4\frac{1}{2}$ miles in length and $1\frac{1}{2}$ miles in average width, with the apex of the triangle to the south, and occupy the summits of the Green hills, which form the watershed between the Elk river to the west and Fording river to the east. Fording river being a tributary to Elk river, with a course approximately parallel to it. The general direction of the summits of these hills being about N. 20 W., with a maximum elevation of about 7,200 feet.

Coal seams.

The coal seams noted, twelve in number, outcrop along the crest of the ridge. The lowest one seen coming to the surface, just south of the most southerly point of the ridge, striking here nearly east-and-west and dipping at about 60° north. From this point northwards, in a distance of about $1\frac{1}{2}$ miles, the strike gradually swings round to about N. 30 W., with a dip of 26° N.E. This strike and dip remains fairly constant as far northward as was noted.

An attempt was made to measure a section across the coal measures, but, as the time was limited and the ground much covered, it must be

considered as open to revision on more detailed work. The result attained is as follows, given in descending order :

		Feet.	Section.
1.	Sandstone	103·0	
2.	Shale	67·0	
3.	Coal	4·5	
4.	Shale	5·0	
5.	Sandstone	55·0	
6.	Shale	8·0	
7.	Coal	1·75	
8.	Shale	5·0	
9.	Coal	35·5	
10.	Black shale	5·0	
11.	Sandstone	46·0	
12.	Shale	24·0	
13.	Arenaceous shale	35·0	
14.	Coal	3·0	
15.	Shale	7·0	
16.	Sandstone	18·0	
17.	Coal	0·75	
18.	Shale	42·0	
19.	Sandstone and arenaceous shale	54·0	
20.	Coal	7·0	
21.	Sandstone	114·0	
22.	Covered	365·0	
23.	Shale, sandstone and covered	261·0	
24.	Sandstone	7·0	
25.	Coal	2·5	
26.	Shale	15·0	
27.	Coal	8·0	
28.	Shale	158·0	
29.	Coal	8·0	
30.	Covered with shale outcrops	300·0	
31.	Black shale	40·0	
32.	Shale and thin bed of sandstone	275·0	
33.	Covered	1,010·0	
34.	Shale	15·0	
35.	Coal	2·5	
36.	Shale	23·0	
37.	Coal	8·0	
38.	Shale	10·0	
39.	Covered	210·0	
40.	Coal	8·0	
41.	Shale	20·0	
42.	Sandstone		
	Total	3,386·5	
	" thickness of coal	89·5	

It is quite probable that there are other seams which were not seen, and it is also possible that some of the seams may appear twice, as the measurements were not continuous, but an attempt at compilation of several partial sections. Immediately below the base of the section

the ground is heavily drift-covered with a few exposures of hard gray sandstone, leaving room for other seams.

Beds underlying coal measures.

The lower beds of the Cretaceous rocks in this neighbourhood show a wide variation from those noted by Mr. McEvoy in his section measured last season near Morrissey, whereas he shows these beds to consist of black and brownish shales, sandy argillites, shaly limestone and calcareous shales (see Summary Report, 1900, page 89), here they are composed almost entirely of hard, light-coloured, rather fine-grained sandstones with a few thin beds of gray shale. The rocks included in the coal measures consist principally of black and gray shales, dark-coloured sandstones and a few thin beds of impure dolomite.

Faulting.

On the east side the coal measures are cut off by an overthrust fault of large dimensions, the line of faulting being nearly parallel to the axis of the ridge, the upper beds of the Devono-Carboniferous limestones and quartzites being lifted to the surface and having the appearance of overlying the coal-measures. Crossing these limestones and quartzites in a northeasterly direction the lower Cretaceous beds (sandstones) are again encountered everlying conformably the Carboniferous rocks, these continue across the valley of Fording river, still dipping to the north-east at decreasing angles, till the coal measures are again met with on the eastern slope of a line of hills which lie between Fording river and the main limestone range to the east. The summits of these hills conforming approximately to the axis of the syncline of the Cretaceous basin. Besides this large fault there are evidences of a number of minor disturbances, but the limited time at our disposal made it impossible to trace them out in detail.

Quality of coal.

No analyses have been made of any of the coal from this area, but in general appearance it is very similar to the coal from the Crows Nest area. The quality of the coal in the various seams does not seem to differ to any great extent, though it is probable that the seams numbered 27 and 29, in the above section, contain a slightly better quality of coal than the remainder.

Means of access.

This area is, at present, very difficult of access, but the Elk river valley presents an easy route for a railway from the Crows Nest Branch of the Canadian Pacific railway at the junction of Michel creek and Elk river to the base of the Green hills. That part of the coal area visited, however, is situated at an elevation varying from 2,800 feet above the valley of the Elk at its southern extremity, to about 2,000 feet above the valley at the northern boundary of lot 4,588, group I, the slope from the valley to the summit of the ridge being very steep. Within these limits there are no transverse valleys of sufficient size to afford a practicable grade from the Elk valley to the coal measures. It is probable, however, that further to

the north the coal measures outcrop in the valley of Elk river and may possibly cross it to the west side.

A rough topographical survey was made of the southern part of this area, a base line having been measured with the Rochon micrometer, angles read with prismatic compass and elevations with the aneroid barometer.

Timber.

The greater part of the timber in this part of the Elk valley has been destroyed by fire, though patches of good spruce (*Picea Engelmanni*) and tamarack (*Larix occidentalis*) remain.

Sulphur spring.

There is a remarkable sulphur spring on the Elk river trail about 17 miles above the mouth of Michel creek. The river valley here is rather wide, open and prairie-like. This spring is situated immediately at the foot of the eastern slope, and occupies a basin about 75 feet long, 40 feet wide and 9 feet deep. The water is strongly impregnated with sulphuretted hydrogen gas, which bubbles up from the bottom in four or five places; the characteristic odour of the gas is noticable for upwards of a mile from the spring when the wind is from that direction. The water is warm and beautifully clear and of a bright green colour. An analysis made by Dr. Hoffmann, of specimens from the deposit at the discharge of this spring gave the following results: 'A mixture of carbonate of lime, with a small quantity of sulphate of lime, a very little carbonate of magnesia and a small quantity of free sulphur.'

Reported southern coal area.

On returning to Fernie preparations were made to leave for the Wigwam river, where the southern coal area was supposed to be situated. Leaving Fernie on July 16 we travelled down the Elk river to the Kootenay valley, thence south to the Tobacco Plains, where I interviewed Mr. Phillips, who, as before stated, had first mentioned the existence of this supposed southern coal area to Mr. McEvoy. Having been furnished by him with a sketch-map of the district, we returned northwards about twelve miles to Desrosier's, where the trail for the Wigwam river leaves the main road. This trail, following an easterly course, crosses the Galton range, which separates the Kootenay river from the Wigwam, at an elevation of about 6,100 feet, coming down to the Wigwam river about twelve miles above its mouth. Crossing the river here, we ascended Bighorn creek, a large tributary from the east, camping about four miles up this stream. Some days were spent here examining the rocks in the vicinity. These consisted chiefly of quartzites with some dark quartzose argillites and micaceous schists. Similar rocks had been crossed all

Rocks of Bighorn creek.

the way from Desrosier's to the Wigwam river, referred to by Dr. Dawson as the 'Quartzite Series' of Cambrian age.*

The attitude of the Cambrian strata is here considerably disturbed, the axes of the folds being, generally speaking, along north-and-south lines. These rocks are overlain by a great thickness of limestones of Devono-Carboniferous age, which were also met with on Bighorn creek, about half a mile east of our camp and apparently extend eastwards to the head of the creek, forming the backbone of the Macdonald range, a high and extremely rugged group of mountains which forms the divide between the Flathead and Wigwam rivers.

Return to Tobacco Plains.

Being satisfied that there were no coal-bearing rocks in the basin of Bighorn creek, I returned to Tobacco Plains to obtain, if possible, further information, Mr. Denis remaining at Bighorn creek continuing the topographical work of that neighbourhood. On arriving at Tobacco Plains, I visited Mr. Phillips again. He stated that coal existed further up the Wigwam river, near the international boundary, and offered to send his son with us to point out the locality. The following day I started back for Bighorn creek with the understanding that Mr. Phillips, jr., would overtake us before evening. However, he did not put in an appearance; so, after waiting two days at our old camp on Bighorn creek, it was decided to move on up the Wigwam without him. This river here flows nearly due north and occupies a rather wide, flat-bottomed valley. There beingnotrail, progress was necessarily slow, but advantage was taken of the low state of the water, which enabled us to keep in the river bottom, crossing and recrossing from one bar to another, except in places where the valley narrowed to a gorge, compelling us to cut a trail on the hillside. In this manner the river was ascended to the international boundary.

Ascent of Wigwam river.

Camps were made at several points in the valley and from them the country explored on either side, but nowhere were any Cretaceous rocks found, the hills on both sides being composed of Cambrian strata, chiefly quartzites. Time was not available to make any complete section of these rocks, the structure generally being somewhat complicated with evidences of much faulting and folding. The upper beds are composed chiefly of rather thin-bedded white quartzites. These are underlain by altered greenish and grayish argillites, usually highly siliceous, some thin beds of gritty silicified sandstone followed by massive red quartzite and impure dolomitic limestones. Near the summit of the Galton range, about five miles north of the boundary, a very hard dark-green intrusive rock was seen cutting the Cambrian

*See Annual Report, Geol. Surv., Can., 1885, (N.S)., vol. I, page 78B.

strata; this was the only intrusive rock noted in place, though in the drift of the river and its tributaries in the vicinity of the boundary there many fragments of a dark very hard amygdaloidal trap. These Cambrian rocks extend from the river westwards at least to the summits of the Galton range and eastward about five miles, when the Devono-Carboniferous limestones of the Macdonald range are found overlying them.

The ground covered, included practically all of the Wigwam basin, from the mouth of Bighorn creek to the international boundary, and within these limits it is fairly certain that no coal-bearing rocks exist. A few days before returning to Ottawa, however, I was informed that coal was reported to have been found between the head of the Wigwam river and Tobacco Plains on the west slope of the Galton range. If there is any truth in this report, the area must be very limited in extent.

Timber.

The valley of the Wigwam river is well wooded throughout with timber of fair size; spruce, (*Picea Engalmanni*), and black pine, (*Pinus Murrayana*) being the predominant trees of the lower levels, while on the higher ridges *Pinus Albicaulus* and *Abies Subalpina* are most abundant.

Game.

Deer are very plentiful, and this valley appears to be one of the few remaining places in this part of British Columbia where beaver are to be found in any numbers.

As the object of our exploration was to search for coal, any detailed topographical work was not attempted, but enough was done to compile a preliminary map of this section.

Arrival of Messrs. Pearce and Taylor.

When we returned to Fernie on August 17th instructions were received to await Mr. Wm. Pearce and co-operate with him in the selection of coal lands that he was to make for the Government. In the meanwhile a few days were spent in preparing a sketch map and short report of the Green Hills area. Mr. Pearce arrived on the 21st and until August 27th we were engaged with him in examining the various openings that had been made on the coal seams of the Crows Nest Coal Field.

A trip was then made to Marten creek and the South Fork of Michel creek with the intention of defining the eastern outcrop of the coal measures, but work had hardly been begun there when a message was received from Mr. Pearce, requesting us to return to Fernie to meet Messrs. Taylor and Turriff who had arrived there from Ottawa to undertake with him the selection of the Government coal lands.

About ten days were occupied in going over the ground with these gentlemen, after which we returned to Marten creek. The lateness of the season with the presence of snow prevented us from continuing our work in the higher mountains, so the remainder of our time was spent in measuring a section of the coal measures on this, the easterly outcrop of the basin as well as examining the upper valley of the South fork of Michel creek with reference to its suitability as a site for mining operations.

Localities suitable for mining operations.

Mr. McEvoy, in his report of last year, mentions five localities from which the coal measures are easy of access, two of these, Michel and Coal creeks, as well as the north side of Morrissey creek are already occupied by the Coal Company, while on the south side of Morrissey creek some prospecting has been done by the Canadian Pacific Railway Company. No important development work has as yet been done at either of the remaining localities, Lodgepole creek and the South Fork of Michel creek. The first of these was visited by Mr. Pearce, while we directed our attention to the latter.

South fork of Michel creek.

The coal measures outcrop in the valley of the South fork of Michel creek, at a point about 10½ miles above the 'loop' of the Crows Nest Branch of the Canadian Pacific Railway, and at an elevation of about 900 feet above the railway. This valley would thus afford a comparatively easy grade for a branch line, and, as it is fairly wide and flat-bottomed, there would be ample room for coke ovens and other necessary structures. As stated by Mr. McEvoy, there are two faults running parallel to the valley, one on each side; the eastern being the most important. This fault was not traced northwards farther than the branching forks of the South fork. To the south it continues nearly parallel to the stream about a mile to the eastward, to near the summit, when the valley swings round to the east, meeting the line of fault which continues across the summit and down the valley of a branch of the Flathead river. This fault is probably an overthrust from the east, the rocks to the west of it in the valley being chiefly conglomerate and gritty sandstones with some beds of brownish and yellowish arenaceous shales, characteristic of the beds overlying the coal measures.

Western fault.

The western fault lies generally below the outcrop of the coal seams on the face of the escarpment, and dies out about one mile and a half south of Marten creek. The structure here is difficult to trace out as the hillsides are heavily drift-covered and densely timbered, exposures being very scarce. However, it is possible that this is also an overthrust fault, the movement in this case being from the west. If so, the area lying between these two faults in the valley-bottom

must be underlain by the coal measures, but further information is necessary before the attitude of these beds is made entirely clear.

The section given below was measured at a point on the west side of the creek, about two miles and a half south of the mouth of Marten creek. The lower seams are not included, as they outcrop in the valley-bottom where the covering of drift is so deep that it was impossible to uncover them in the time available. The strike here is generally about N. 9° W., dip about 25° to the west, gradually flattening towards the west. This dip remains fairly regular to the north for about a mile, when the western fault mentioned above is met with. To the south the coal seams gradually disappear beneath the bed of the creek, which is here rising rather rapidly, till the summit is reached, when they are cut off by the eastern fault and do not outcrop again for some miles down the Flathead river.

The section which follows, measured by Mr. Denis, is given in descending order :

	Feet.	Measured section.
1. Gray arenaceous shale with occasional narrow bands of black shale	46·2	
2. Sandstone	61·5	
3. Gray shale	24·9	
4. Coal	4·2	
5. Gray shale	30·0	
6. Black shale	3·2	
7. Coal	2·8	
8. Black shale	3·2	
9. Gray shale with narrow bands of black shale	89·3	
10. " "	9·2	
11. Black "	10·0	
12. Sandstone	0·7	
13. Gray and black shale	8·4	
14. " shale	47·5	
15. Coal	2·0	
16. Gray shale with narrow bands of carbonaceous shale	5·7	
17. "	82·7	
18. Coal with shale parting	3·6	
19. Gray shale	9·4	
20. Black "	3·0	
21. Gray "	7·7	
22. Coal	0·8	
23. Gray shale	64·7	
24. Coal with shale parting	7·3	
25. Gray and black shale with a little coal	8 7	
26. " shale	25·0	
27. Coal	1 5	
28. Black shale	4·6	
29. Gray "	7·2	
30. Coal	13·0	
31. Black shale	0·8	

32.	Arenaceous shale with thin beds of sandstone	31·0
33.	Gray shale with a little coal	73·5
34.	Carbonaceous shale and coal	1·6
35.	Gray shale	8·2
36.	Coal	2·1
37.	Shale	16·1
38.	Covered	32·0
39.	Sandstone	8·2
40.	Arenaceous shale with narrow bands of black and carbonaceous shale	32·0
41.	Black and carbonaceous shale with thin seams of coal	24·4
42.	Coal with shale parting	7·1
43.	Black shale with thin seams of coal	46·1
44.	Dark grayish shale	15·6
45.	Coal with shale parting	25·2
46.	Black shale with thin seams of coal	10·0
	Total	921·8
	" thickness of coal	69·6

A comparison of this section with that measured by Mr. McEvoy last year near Morrissey, gives the following results :—

Correlation with section near Morrissey.

On South Fork of Michel Creek.		*Near Morrissey.*	
Seams numbered,	Feet.	Seams numbered.	Feet.
24 Coal with partings	7·3	50 Coal	7·0
Intervening beds	47·0	Intervening beds	35·0
30 Coal	13·0	53 and 55 Coal with parting	14·0
Intervening beds	115·1	Intervening beds	154·0
36 Coal	2·1	58 Coal	3·0
Intervening beds	112·7	Intervening beds	120·0
42 Coal with partings	7·1	61 Coal	10·0
Intervening beds	61·7	Intervening beds	140·0
45 Coal with partings	25·2	63 Coal (upper 10 feet impure)	36·0

It will be seen from the above table that the coal seams are fairly persistent, considering the fact that these two points are about ten miles apart. The intervening beds, however, show a wider variation with a decided tendency to thin out in the lower part of the section at least.

The Crows Nest Pass Coal Company are operating mines at three points, Michel, Coal creek and Morrissey creek. At present Coal creek is their principal point of supply, producing over 1,600 tons a day. During the past summer extensive improvements have been made and new machinery installed, two Robb engines of 250 horse power each, one 200 horse-power compressor, and a new ventilating fan with a capacity of 250,000 cubic feet of air per minute, as well as a new tipple for the No. 1 mine having been added to the plant at Coal creek. With these additions in operation it is expected that the output will be very largely increased before long.

At Michel the output has been about 200 tons a day, won chiefly in the course of development work. Mining at this point is attended with more difficulties than at either Coal or Morrissey creeks, several faults having been encountered, the structure generally being more disturbed, and the coal more sheared and friable. Mining operations.

No shipments have been made as yet from Morrissey but preparations are well under way and it is expected that before long the output from this point will equal or even exceed that from Coal creek. A spur line is now nearing completion from the Crows Nest Southern Railway to these mines. This railway, at present under construction, runs from Fernie to Tobacco Plains, there connecting with the Great Northern Railway, and will afford an outlet to the south for a large output of coal. Six seams have been opened up at Morrissey which correspond to seams numbered 61, 63, 71, 73, 75 and 81 in Mr. McEvoy's section (see Summary, 1900). Railway construction.

The Crows Nest Pass Coal Company have now in operation at Fernie 424 coke ovens, of which 112 have been built during the past summer, producing about 850 tons of coke a day. At Michel a battery of 212 ovens is now under construction, while at Morrissey the company is contemplating building 50 more.

As before mentioned, the Canadian Pacific Railway Company has done some prospecting work on the south side of Morrissey creek. In addition to this some work has been done by this company on the South fork of Michel creek, several seams having been uncovered here. In most cases, however, sufficient work was not done to show the thickness of the seams and, on account of the disconnected nature of the work, the relationship of the seams in the various openings was not clearly shown. Two bore holes were sunk with a diamond drill by this company near Michel, both immediately alongside the railway, the first (No. 1) about 1·4 miles, and the second (No. 2) about 2 miles south-east of the station. Copies of the records of these borings, kindly furnished by the company, are given below. Prospecting by C.P.R.

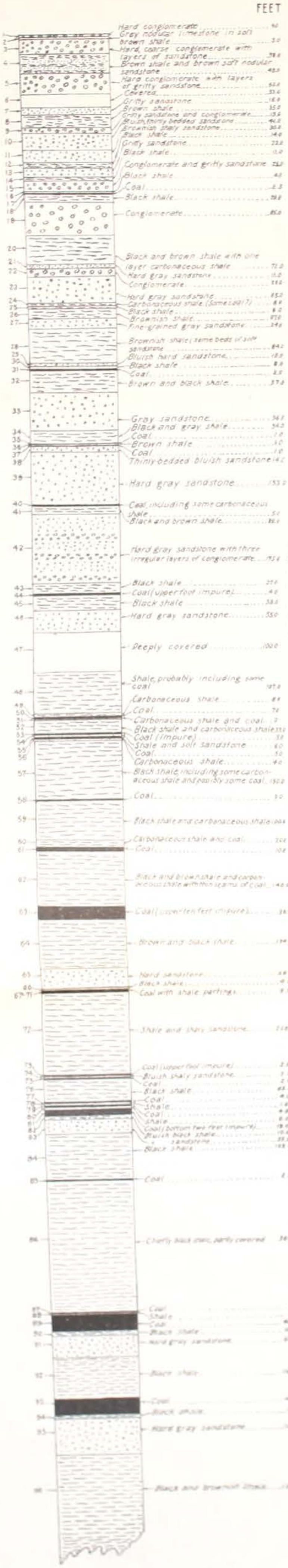
No. 1 Drill Hole. Drill holes at Michel.

		Feet.	In.
1	Sand and gravel	7	6
2	Hard gray sandstone	41	6
3	Conglomerate	23	0
4	Hard sandrock and conglomerate	16	0
5	Soft black sand	2	0
6	Slate	21	6
7	Coal and slate	1	6
8	Coal	3	0
9	Slate	15	0
10	Coal	3	0

		Feet.	In.
11	Slate	15	0
12	Sand shale	26	6
13	Coal	0	6
14	Soft black slate	1	6
15	Coal	2	0
16	Sand shale	73	6
17	Coal	5	0
18	Coal and slate	20	6
19	Sand shale	22	6
20	Gray sandrock	20	0
21	Slate	13	6
22	Coal	3	9
23	Soft slate	0	9
24	Coal	2	3
25	Soft slate	1	0
26	Coal	3	3
27	Soft slate	0	9
28	Coal	1	3
29	Soft slate	1	0
30	Coal	2	0
31	Soft slate	0	9
32	Coal	2	0
33	Slate	6	6
34	Coal	7	0
35	Sand shale	10	0
36	Dark hard sandstone	94	0
37	Coal	4	0
38	Slate and coal	2	0
39	Sand shale	13	0
40	Black slate	25	9
41	Coal	5	6
42	Slate and coal	4	9
43	Sand shale	11	0
	Total	536	0

No. 2 Drill Hole.

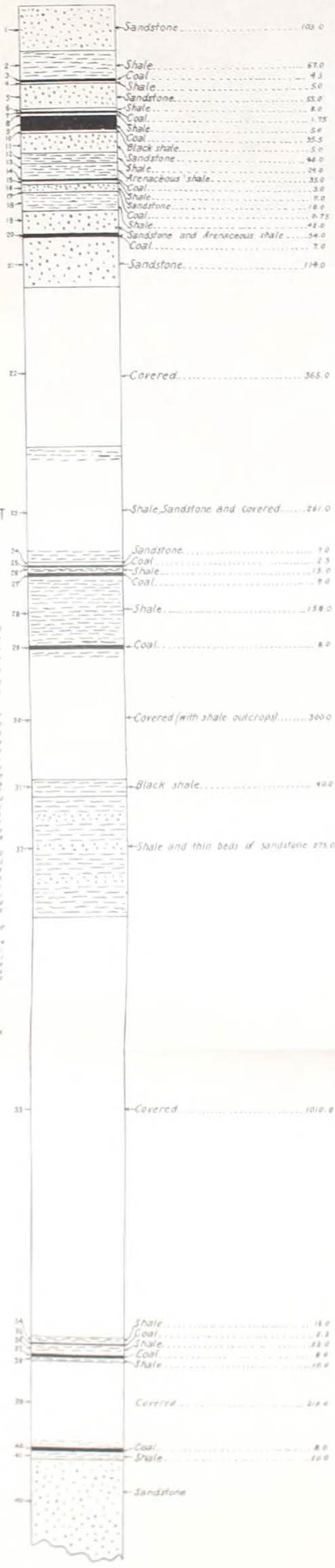
		Feet.	In.
1	Sand and gravel	6	0
2	Gray sandrock	75	0
3	Gray sandrock and conglomerate	12	0
4	Slate	18	6
5	Coal	2	6
6	Slate	18	0
7	Slate and coal	1	0
8	Coal	5	0
9	Slate and coal	3	0
10	Slate	7	0
11	Coal	2	0
12	Slate	23	0
13	Shale	119	0
14	Dark gray sandrock	23	0
15	Slate and coal	10	0
16	Coal	8	0



No.1 Section, near Morrissey
(McIvor 1900)



No.2 Section, South Fork Michel Creek



No.3 Section, at Green Hills

SECTIONS of COAL-MEASURES CROWS NEST COAL FIELDS

To illustrate Summary Report by
W. W. LEACH B.A.Sc.
1901

Scale 300 Feet to 1 Inch

	Feet.	In.
17 Slate	0	6
18 Coal	0	6
19 Slate	0	3
20 Coal	7	3
21 Slate	1	3
22 Coal	0	6
23 Slate	7	6
24 Coal	8	9
25 Slate	0	9
26 Coal	6	3
27 Slate	0	9
28 Coal	0	6
29 Slate and coal	5	9
30 Coal	2	0
31 Sand shale	10	0
32 Dark gray sandrock	58	0
33 Black slate	10	3
34 Coal	2	6
35 Sand rock, shale and slate	39	9
36 Slate and coal	1	0
37 Hard gray sandrock	13	0
Total	510	0

It will be noticed that there is no mention of the dip of the strata in either case, so that it is probable that a deduction from the above figures should be made as it is not likely that the strata here are horizontal. It is evident that the sections shown by these two bore holes are at the same horizon, although the coal seams show a wide variation in the two holes, one seam, No. 17, shown in bore hole No. 1, not appearing in No. 2 hole. This may be due to local thinning out. These sections hardly afford sufficient information to attempt a correlation with Mr. McEvoy's section near Morrissey. It is possible, however, that the seams from Nos. 22 to 34 in bore hole No. 1 and from Nos. 16 to 30 in bore hole No. 2 represent the seams included between Nos. 77 and 81 in the Morrissey section.

Fossils.

The following fossils were collected during the summer, both from the coal-bearing rocks and the underlying limestone, all of them, as yet, being undetermined: Seven fragments of belemnites and one impression of an ammonite from the shales underlying the coal measures near Fernie; one fossil plant from lower shales at Hosmer, two fossil plants from coal seams at Morrissey, eighteen fossil plants from coal seams at Green Hills, four corals and several spirifers from top of Devono-Carboniferous limestones of the Green Hills.

Red Deer River, Alberta.

Mr. Lawrence M. Lambe.

The second part of 'A Revision of the Genera and Species of Canadian Palæozoic Corals' was issued early in May. This report, referred to in last year's Summary as being then in the press, forms part II. of volume IV of 'Contributions to Canadian Palæontology' and is descriptive of the Madreporaria Aporosa and the Madreporaria Rugosa. The two parts of this report on fossil corals together comprise two hundred pages of text illustrated by eighteen plates.

Cretaceous vertebrates.

The study of the vertebrate remains from the Laramie and Belly river series of the Cretaceous of the North-west Territories was continued during the past year, and considerable progress has been made therein, the object in view being the production of an illustrated report, descriptive principally of the Dinosaurian, Chelonian and Crocodilian remains found so admirably preserved at many localities in our North-west. The material available for study consists, for the most part, of collections made by myself on the Red Deer river, Alberta, in 1897 and 1898, to which has been now added a large collection made during the past summer in the same locality. Additional to these collections are specimens previously obtained from the same horizons, at a number of localities in the North-west, by officers of the Survey, viz: by Dr. G. M. Dawson in 1873, 1874 and 1881; by Professor John Macoun in 1880, by Mr. R. G. McConnell in 1882, by Mr. T. C. Weston in 1883, 1884 and 1889 and by Mr. J. B. Tyrrell in 1884.

Collection of Dinosauria.

Field-work.

Over two months, viz., July, August and part of September were spent in the field this year. Acting under instructions to supplement the collections of 1897 and 1898, by spending another season in the Red Deer river district, I left Ottawa on July 2 and proceeded direct to Medicine Hat, Assiniboia, where provisions, etc., were procured. The Red Deer river was reached by trail from Bantry, a flag station on the Canadian Pacific Railway, about sixty five miles north-west of Medecine-Hat.

In the extensive area of 'bad-lands,' exposing the rocks of the Belly river series of the Cretaceous, on the Red Deer river between the mouth of Berry creek and Dead Lodge canyon, where I remained in camp until the end of the first week in September, I was successful in securing a large collection of Chelonian, Dinosaurian, Crocodilian fish, primitive mammalian and other vertebrate remains of considerable

scientific value. This collection is of importance in working out the material already on hand as it throws much additional light on some of the problems relating to the generic and specific affinities of the animals represented in the collections of former years. It also adds to our knowledge of Cretaceous vertebrate life generally, indicating at the same time the richness of the palæontological field in the north-west and the possibilities there for further research. Importance of collection of 1901.

I was assisted in the field by Mr. Heber Cole, of Montreal, who contributed materially in every way to the success of the expedition. After returning from the west until the end of the year, my time was almost entirely occupied in a preliminary study of the newly acquired material from the Red Deer river.

A short paper on *Adocus variolosus*, Cope (sp.), one of the turtles represented in the collections from the Red Deer river was issued in June last. This report appeared in the 'Ottawa Naturalist' under the title 'Notes on a turtle from the Cretaceous rocks of Alberta' and is illustrated by four plates. Cretaceous turtle.

The following notes are descriptive of some interesting turtle remains collected last summer :—

ON TRIONYX FOVEATUS, LEIDY AND TRIONYX VAGANS, COPE, FROM THE CRETACEOUS ROCKS OF ALBERTA.

By Lawrence M. Lambe.

(With four plates.)

During the past summer whilst engaged, on behalf of the Geological Survey, in making a collection of vertebrate remains from the Cretaceous of the Red Deer river, Alberta, to supplement the material obtained in two former years, the writer was fortunate enough to secure two almost complete carapaces of turtles, one referable to *Trionyx foveatus*, Leidy, the other to *T. vagans*, Cope. In the Red Deer river district, referred to, the remains of these two species are abundant and are found associated with a number of other species of Chelonia, of which one is *Adocus variolosus*,* Cope (sp.), remarkable

*Proceedings of the Academy of Natural Sciences of Philadelphia, vol. XXVIII, p. 257, 1876 (Cope), and Ottawa Naturalist, vol. XV, p. 63, plates iii, iv, v and vi (Lambe).

alike for its size and the strikingly rugose character of the sculpture of its shell. The rocks holding these remains belong to the Belly river series of the Cretaceous, brackish water deposits underlying the Pierre Fox-Hills formation, by which they are separated from the still higher Laramie series.

Trionyx foveatus† was originally described in 1860 by Leidy from small fragments of costal and sternal bones from the Judith river beds of Nebraska.

The Red Deer river specimen of *T. foveatus* consists of the carapace, in which the nuchal plate is missing, without any part of the plastron. Sternal plates probably referable to this species were found not far distant, but further reference will not be made to them here.

The carapace (Plate II, fig. 2) is a little less than one-fourth broader than long, and is only slightly convex. The eight costals of the left side are practically entire but the first right costal is wanting. Five neural plates are preserved with part of another that lay principally between the first costals, its posterior end being between the front inner borders of the second costals. If this neural were as long in proportion to its breadth as the plate immediately following it, its front margin probably effected a sutural union with the nuchal plate, and its outline was presumably as is shown by the dotted lines in the figure.‡ Neurals two, three and four are six-sided, neural five is oblong, and neural six, lying for the most part between the sixth costals, is shield-shaped, coming to a point behind. The seventh costals are suturally united at their inner ends, where they develop a breadth sufficient to separate the eighth costals from each other. These latter are subtriangular in shape, with three convex sides. The nuchal plate was evidently small, as the lateral termination of the suture (*a* in the figure) between it and the left first costal indicates a side extension scarcely past a point in advance of the mid-length of the first costal. Small, shallow, rounded depressions mark the surface of the neurals and the inner ends of the costals. In the latter, as the distance from the neurals increases, the depressions gradually grow larger and more decided, becoming often reniform or

†Transactions of the American Philosophical Society, vol. XI, p. 148, pl. xi, figs. 1 and 2. Extinct Vertebrata from the Judith river and Great Lignite formations of Nebraska.

‡Since the above was written some misplaced fragments have been added to the anterior end of this carapace; they reveal the fact that the first costals are in reality separated by a divided first neural. The writer wishes here to express his indebtedness to Professor Osborn and Dr. Hay, of the American Museum of Natural History, for the loan of the type of *Trionyx vagans* and the opportunity thus afforded him of making a direct comparison of the type with the Red Deer specimen.

oval, and frequently coalescing, until in the distal ends of the costals a few more or less continuous furrows are formed parallel with the outer margins of the plates. These furrows are a conspicuous feature in the sculpture; they are not so well marked on the posterior margin of the carapace, but they are well developed near the front edges of the first costals. In the neurals and inner halves of the costals there is a narrow, smooth strip devoid of sculpture bordering the sutures. The rib-heads are well developed.

Measurements :

	M.
Estimated length of carapace along median line ($6\frac{7}{10}$ inches)....	·170
Distance from front margin of first costal to back margin of seventh costal (slightly over $6\frac{1}{2}$ inches).....	·167
Maximum breadth of carapace ($8\frac{4}{10}$ inches).....	·214
Length of second neural.	·023
Maximum breadth of second neural.....	·017
Thickness of fourth costal at centre near inner end.....	·005
Thickness of fourth costal at centre near outer end.....	·005
Thickness of eighth costal at centre.....	·005

Trionyx planus,* Owen and Bell, a British Lower Eocene species, described from the posterior half of the carapace, bears a strong general resemblance to *T. foveatus* as regards the sculpture and also in the absence in both species of the seventh and eighth neurals accompanied by a similar curtailment of the sixth neural. The strong development of the seventh costals found in the Red Deer river carapace resulting in a reduction of the eighth pair of costals may be an irregularity of growth of no specific importance.

The second species of *Trionyx* represented by an almost complete carapace is referred to *T. vagans*, Cope, first described by that authority in 1874† from 'a number of fragments of costal bones and perhaps of sternals also,' from the 'Lignite cretaceous of Colorado; near the mouth of the Big Horn river, Montana; Long lake, Nebraska; found at the last two localities by Dr. Hayden.' Later in 1875, in 'The Vertebrata of the Cretaceous Formations of the West' the same description appears; this time with figures of two fragments of costal bones. Dr. O. P. Hay, of the American Museum of Natural History, New York, has kindly compared part of a costal plate from the Red Deer river with fragments labelled *T. vagans* by Professor Cope in the New York collections. Owing to the insufficiency of the published

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* Monograph of the British Reptilia of the London Clay, part I., p. 58, tab. XIXC, 1849, Palæontographical Society.

†Bulletin of the United States Geological Survey of the Territories, 1874, No. 2, p. 29.

description and figures of this species, the writer could scarcely judge whether the Canadian specimens were or were not referable to *T. vagans*, but Dr. Hay writes that he thinks they probably are.

The carapace (Plate IV, fig. 4) is broader than long, the breadth exceeding the length by more than one-sixth and it is only moderately convex. In outline, as seen from above, it is flat behind with the sides curving broadly to the front margin, at the centre of which there is a shallow concavity. The shell protrudes where the ribs pass outward from beneath, causing the lateral margin to be sinuous, the sinuosity being most marked toward the front in the first, second and third pairs of costal plates. Of the eight pairs of costals, the first costals are the broadest at the inner ends, whilst the fifth are the broadest distally. The seventh costals are extremely narrow throughout their length and the eighth pair is well developed. The first costals increase in breadth rather suddenly at their outer ends and are separated by a divided first neural plate. The neurals gradually decrease in breadth to the fifth, their sides being not so nearly parallel to each other as those of the corresponding plates in *T. foveatus*. The sixth and last neural is very much reduced in size and is irregularly oval in outline. Of the protruding rib-ends, all the six of the left side were secured, in a fair state of preservation, except the one belonging to the first costal and it was obtained in part. The rib-heads are well developed. In the figure the nuchal plate is represented as entire. Of the carapace under consideration, the central part only of the nuchal plate, extending from the margin in front to the suture behind, was found, but fortunately the left end of a nuchal, of another individual of similar size, showing the left front margin and the suture between the plate and the first costal with part of the latter adherent, supplied the deficiency. The sculpture consists of a network of narrow ridges ramifying and inosculating so as to enclose small, sunken areæ of irregular shape and size, the areæ being generally wider than the ridges are broad. The frequent confluence of a varying number of areæ results in a more open pattern, the ridges at times shewing a tendency to run in parallel lines. The sculpture is not so distinctly defined near the sides of the carapace as it is toward and at the centre and anteriorly, but in the hinder part it is more decidedly rugose, the ridges being here higher and the enclosed areæ larger. Near the intercostal sutures, more particularly in the inner halves of the costal bones, the sculpture is partially effaced and consists of low, poorly defined parallel ridges at right angles to the sutures, forming a distinct border, with a maximum breadth of about ·5 centimeters. A smooth border, broadest at the sides of the carapace and narrowest in front, extends along the whole of the peripheral edge.

As regards a divided first neural in species of this genus, it is interesting to note that Lydekker in describing *T. melitensis*, from the Miocene of Malta, in 1891, (Quarterly Journal of the Geological Society, vol XLVII., p. 37, fig. 1) mentions the occurrence in the Miocene species of a divided first neural and remarks (p. 37) that 'all the fossil species hitherto described, of which the entire carapace is known, agree with the normal type in having but a single long neural between the first pair of costals.'

Measurements :

	M.
Length of carapace along median line ($18\frac{1}{2}$ inches)	·470
Maximum breadth of carapace ($23\frac{2}{10}$ inches)	·590
Breadth of first costal at inner end	·075
Thickness of same near inner end	·009
Thickness of same at outer end	·012
Breadth of fifth costal at outer end	·119
Thickness of same at outer end	·013
Breadth at mid-length of seventh costal	·036
Thickness at centre of eighth costal	·010
Maximum breadth of neural 1	·056
Maximum breadth of neural 1a	·039
Length of same	·043
Thickness of nuchal plate at left end	·018
Length of vertebral centrum	·045

EXPLANATION OF PLATES.

PLATE I.

FIGURE 1. Upper surface of the carapace of *Trionyx foveatus*, Leidy; from the Cretaceous of Alberta. One-half natural size. The sinuous lines indicate the sutures between the bones; the dotted ones parts restored; NU, nuchal bone; N 1, 2, &c., neural bones; C 1, 2, &c., costal bones.

FIGURE 1*a*. Outline of the transverse curve of the upper surface of the carapace.

PLATE II.

FIGURE 2. Upper surface of the carapace shewn in plate I; from a photograph. Considerably over one-half the natural size.

PLATE III.

FIGURE 3. Upper surface of the carapace of *Trionyx vagans*, Cope; from the Cretaceous of Alberta. One-eighth the natural size. Lines and letters as in figure 1 of plate I.

FIGURE 3*a*. Outline of the transverse curve of the upper surface of the carapace.

FIGURE 3*b*. The sculpture of part of the upper surface of the same carapace; from a photograph. Natural size.

PLATE IV.

FIGURE 4. Upper surface of the carapace shewn in plate III; from a photograph. Slightly less than one-fourth natural size.

Region South-east of Lac Seul.

Mr. William McInnes.

The winter of 1900–1 was spent at Ottawa in office work and was chiefly given to the supervision of the compilation of the Manitou sheet and to the preparation of a report to accompany that and the Ignace sheet.

Scope of work. Pursuant to instructions, the work of the past summer was directed mainly to the completion of the geological and topographical details necessary for the compilation of the geological map-sheet lying to the north of the Ignace sheet. Assistant. I was accompanied from Ottawa by Mr. A. E. G. Mackenzie, of Campbellton, N.B., who had been appointed as my assistant for the summer. Mr. Mackenzie proved most willing and capable and his services during the summer were of value.

Canadian Northern Railway. While waiting for canoes at Port Arthur I was enabled, through the courtesy of Mr. Mann, to make a trip to the end of the track on the Canadian Northern Railway, where part of the Atikokan iron belt was examined. At locations 138x and 139x two bands of magnetic iron ore were seen, not apparently of high percentage and shewing considerable sulphur in the form of pyrite. These belts lie about 200 yards to the north of the right-of-way and their outcrop on the hill is perhaps 100 feet above it. This favourable situation led to some exploratory work being done later in the season that resulted, I am informed, in shewing up a band of much cleaner ore. These deposits form part of the Atikokan iron-bearing belt and do not differ genetically from the others that have been described in earlier reports.

Area covered. The primary object of the season's work was to trace with greater accuracy the Sturgeon lake gold-bearing belt and to work out, as well as possible, the geology of an area of 3,456 square miles lying to the south and east of the eastern half of Lac Seul. A micrometer survey of Sturgeon lake made during the previous summer by James Robertson, P.L.S., for the Ontario Crown Lands Department, was of great assistance and rendered a further topographical survey of that lake unnecessary. In other parts of the area, boat-log and track surveys were carried on concurrently with the geological examination. Starting from Dinorwic station the part of Minnitaki lake not already examined and of which no detailed map was available was first gone over. This lake lies entirely within the Huronian belt that has now been

Gold bearing belt.

traced continuously from Whitefish bay on Lake of the Woods to the Albany river, having gold-bearing veins at intervals for the whole distance. About the lake, typical Huronian (Keewatin) rocks everywhere occur, the greater proportion consisting of basic eruptives and their derived schists, with a considerable development of more acid eruptives of quartz-porphyry types and of altered sedimentaries. Work was being done on two of the numerous gold locations on the lake, viz., on Twin lakes, near the inflow of English river and at Grassy Narrows.

Conglomerate at Abram lake.

Continuing through Abram chute to Abram lake, the belt is crossed nearly at right angles to its general trend, and a good section of the rocks is afforded. At Abram lake, an interesting conglomerate, noted by Dr. Bell in 1871, is strongly developed, outcropping in a striking way to form a chain of islands that, with projecting points on either shore, nearly cut the lake in two. This conglomerate is made up of pebbles, from quite small to two feet or more in diameter, enclosed in a felspathic green schist matrix, the pebbles being well-rounded and water-worn, like beach pebbles. They include granite and granite-gneiss (in greatest proportion), fine banded gneiss, schist, flinty quartzite, diorite, and white vein-quartz.

Conglomerate belt.

The strike of these outcrops is N. 60° E., and they may be traced on this course to Little Vermilion lake to the west, where both conglomerates and associated quartzites are well exposed, and up the Sturgeon river to the east. Continuing towards Lac Seul, the northern edge of the Huronian belt is reached at the northern side of Pelican lake, and from this point northward, biotite granite-gneisses are continuous, striking N. 60° E. with minor, local variations. At Abram lake a number of locations for gold have been taken up, but little work has yet been done.

English river.

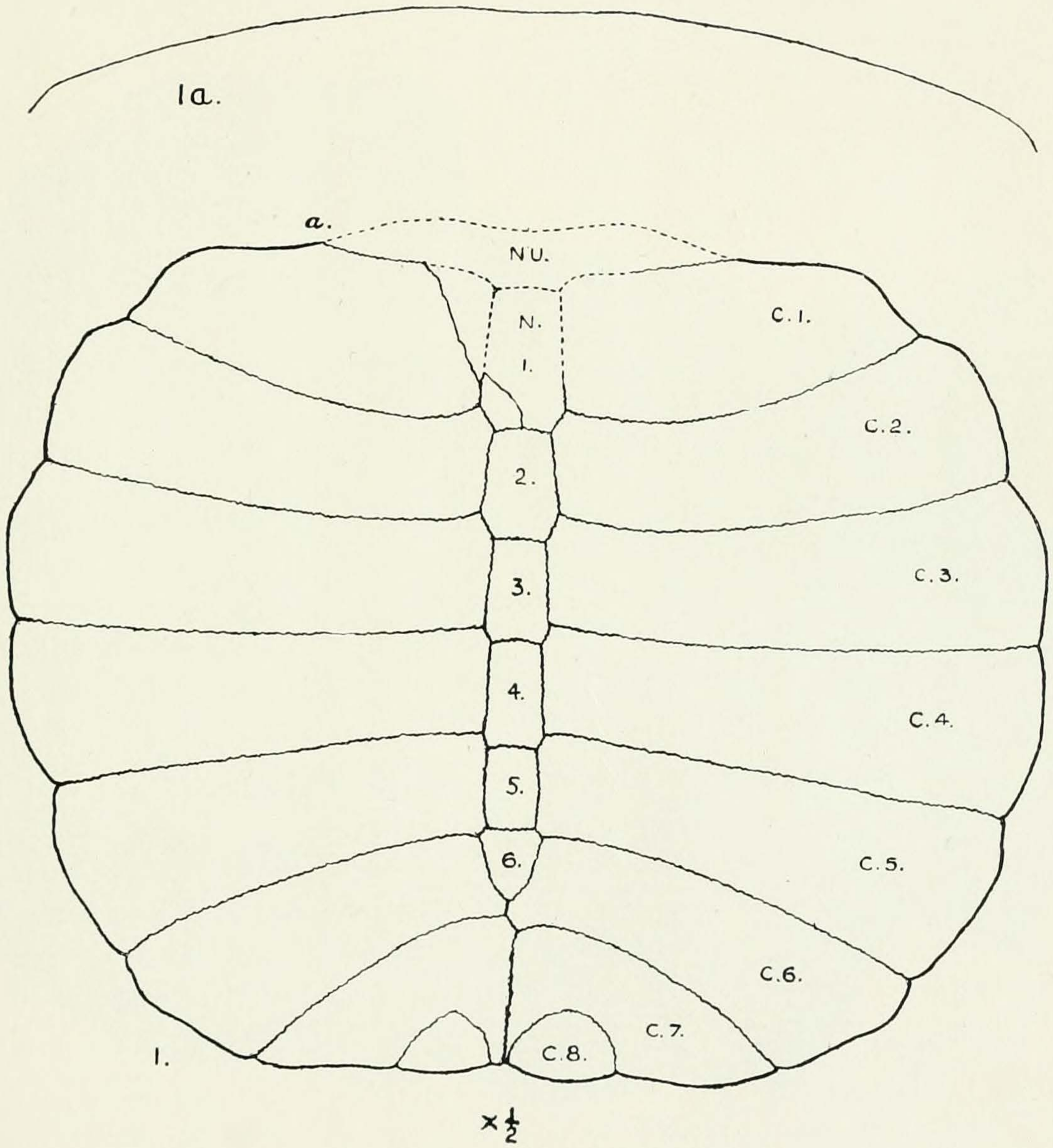
The descent of the English river between Minnitaki Lake and Lac Seul, estimated by barometric readings, is in the vicinity of twenty-five feet, the main drop occurring at the lower end of Pelican lake, where, by a fall and rapid, the river descends about eighteen feet. A

Falls and rapids.

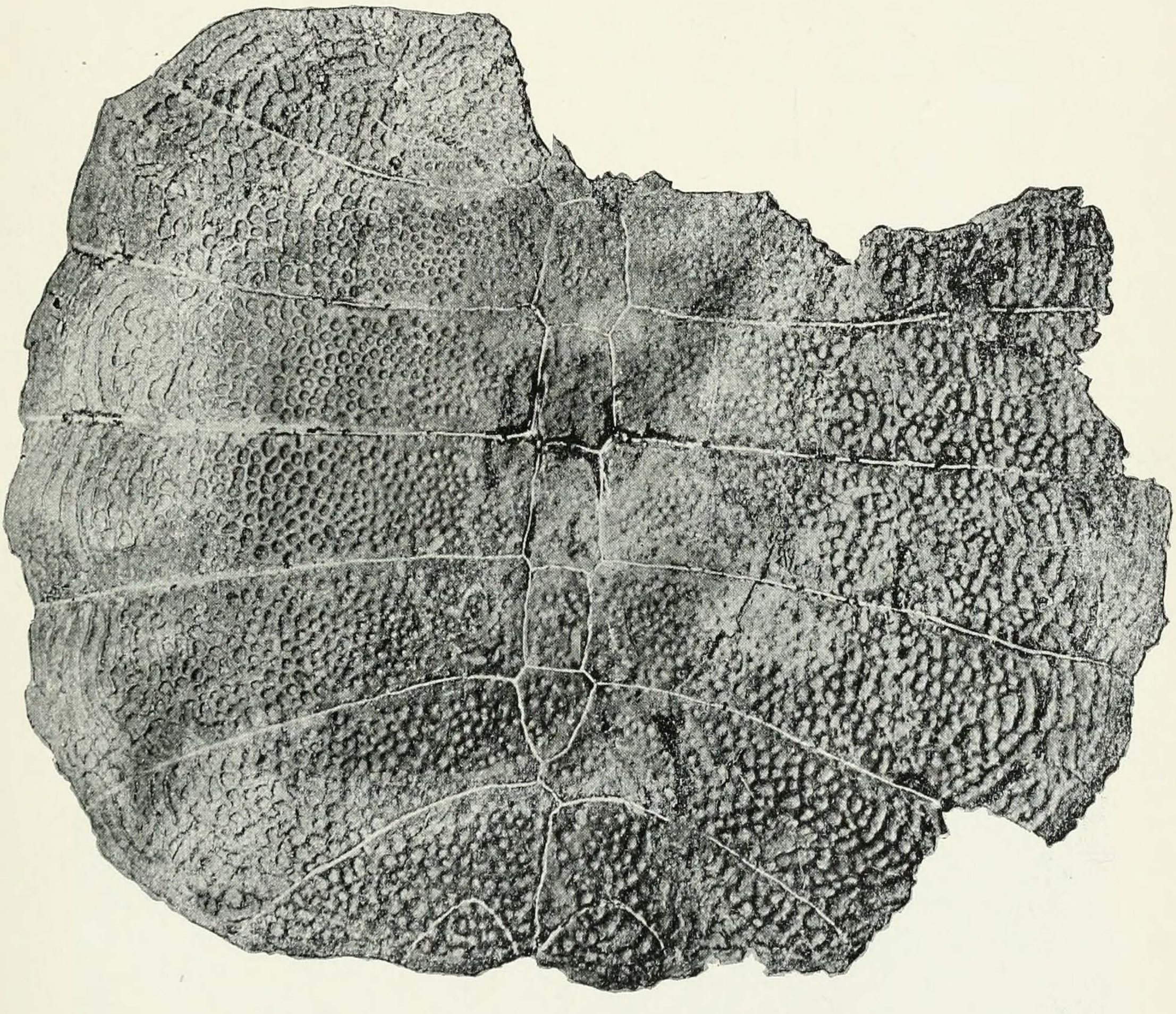
small rapid at the entrance to Abram lake, one at the outflow and another below the forks, are the only other breaks in the continuous smooth navigation to Lac Seul.

Fork of English river.

At nineteen miles above the lake, the river divides into two branches, emptying into the lake at points fifteen miles apart and forming an island about 100 square miles in area. The shores of Lac Seul were followed in a westerly direction only as far as the Hudson's Bay Post, biotite gneisses occurring all along with a uniform trend about N. 60°

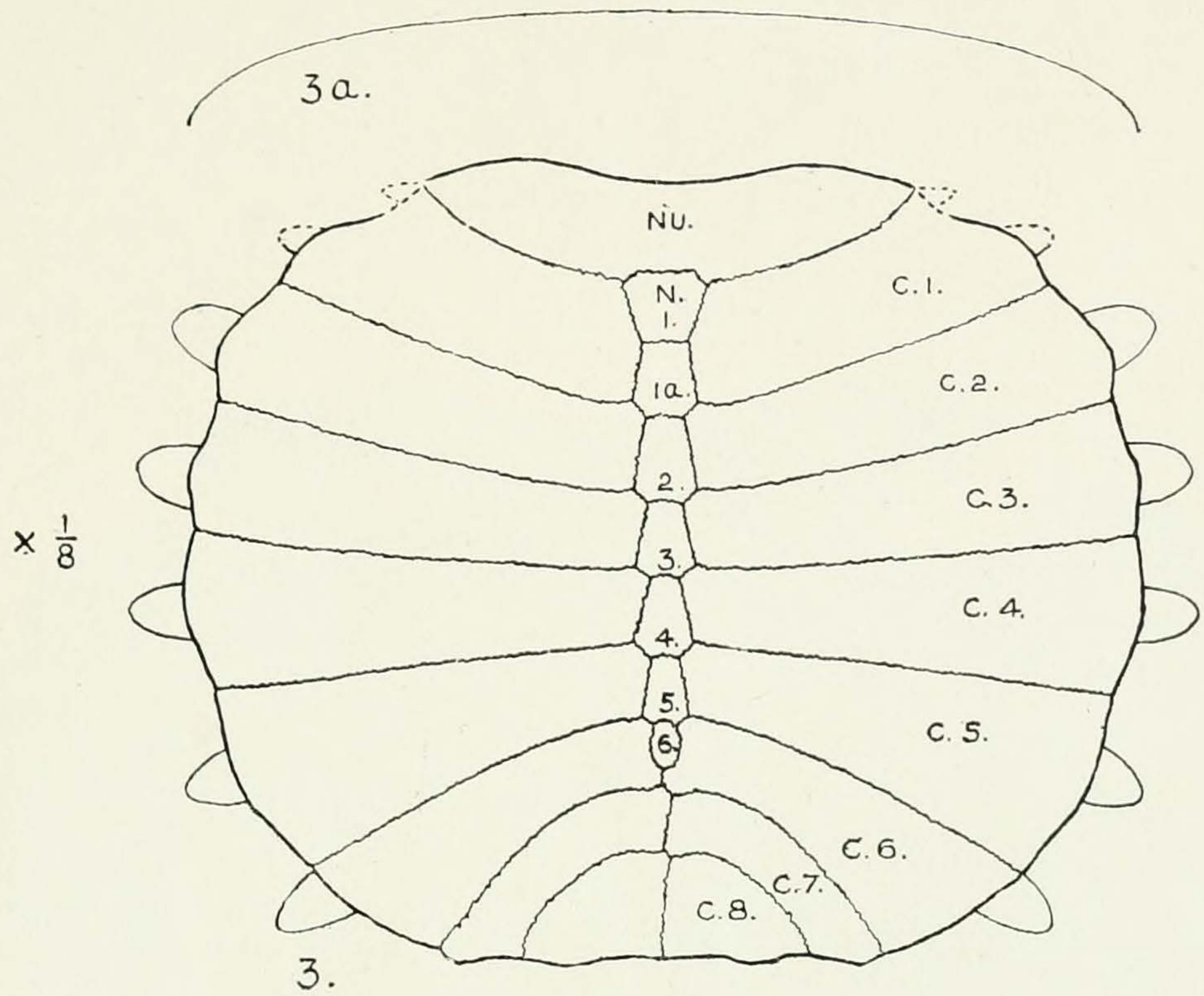


× ½



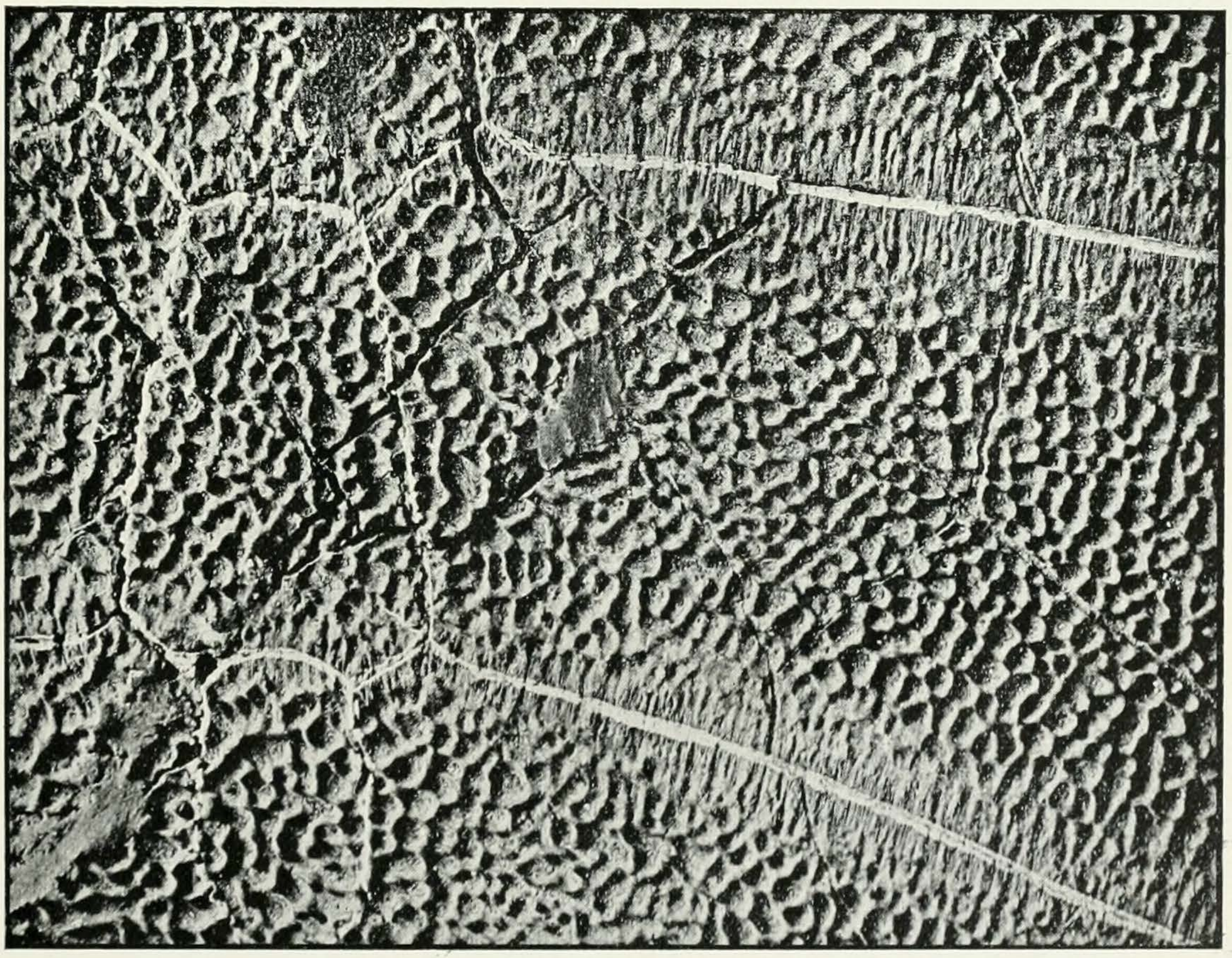
2.

3a.

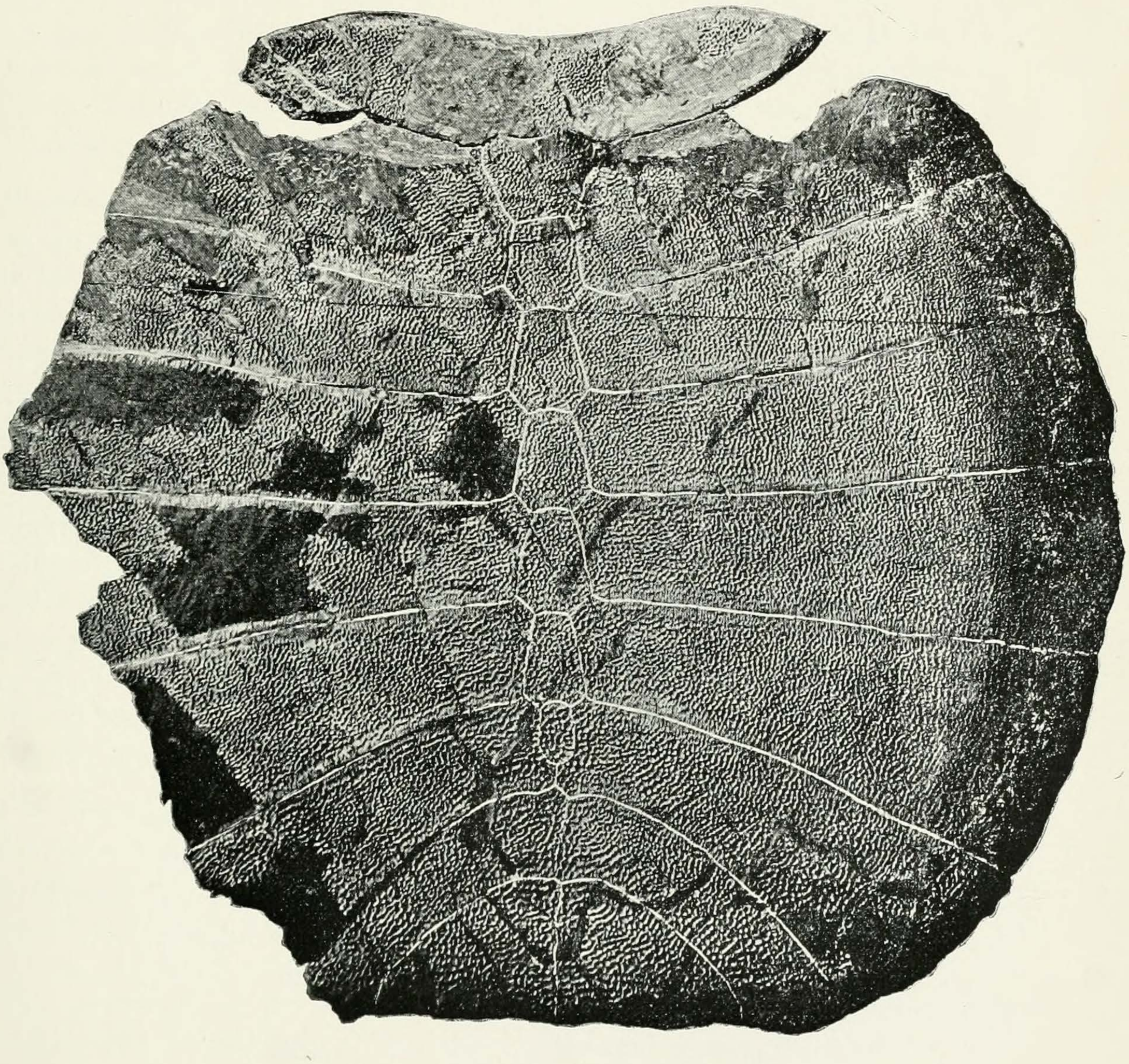


× 1/8

3.



3b.



E. Many of the islands and the north shore of the lake are drift-covered, the drift consisting of clay with overlying, stratified sands containing boulders and pebbles of gneiss, of various types of Huronian rocks and of limestone, dolomite and flint holding fossils of Devonian age that probably indicate a glacial origin from the Devonian areas near James bay. The shores of Lac Seul were examined to its head at the falls on the Watap or Root river. The same biotite gneisses occur all along. They are in many places garnetiferous, the crystals of garnet in some of the coarser pegmatitic beds reaching a fair size—a quarter of an inch in diameter. Only at one point, on the south shore above Vermilion river, is there any marked change from the prevailing Laurentian type of rock. Here, though still gneisses, the finer, black bands increase in volume and show many of the features characterizing an approach to the schists of the Huronian. Though no rocks unmistakeably Huronian were seen, there is good reason to infer their presence at no great distance.

Lac Seul drift area.

Huronian.

The drift area already referred to extends easterly for some distance along the north shore, shewing at a number of places, well-marked terraces rising about thirty feet above the lake level. No veins carrying valuable minerals in any quantity were seen about the lake. The principal feeders flowing into this half of the lake are the Watap at the head of the lake, the Vermilion from the south-east, and the Wapessi, a large river entering the lake from the north above the eastern narrows and draining a number of lakes of good size.

Terraces.

Returning towards the railway, Vermilion lake and Little Vermilion lake were examined. The Huronian band of Minnitaki extends westerly beyond these lakes, petering out however before reaching the English river again. This westerly extension of the belt has been prospected for only a short distance west of Vermilion lake, owing largely to the fact that a considerable thickness of drift is reported to overlie the greater part of it.

Vermilion lake.

Vermilion lake is a large body of clear water about 9 miles long by a mile and a-half wide, and varying in depth from ninety to a hundred and twenty feet. Besides the common fish of the district it abounds in maskinongé of good size. Typical Huronian rocks occur all about the lake, including a considerable thickness of quartz porphyry. At the eastern end of the lake a deposit of fine granular iron pyrites of considerable size outcrops at the shore. Its exact extent could not be determined, owing to the covering of drift, but a width of over ten feet was seen at the outcrop. A deposit of red oxide derived from this, colours the beach pebbles for some distance and gives the lake its name of Wunnummini (Vermilion) lake.

Iron pyrites.

Conglomerate at Little Vermilion lake.

On Little Vermilion lake the schist-conglomerate of Abram lake is again seen evidently forming a persistent band between the two and associated with thick beds of quartzite similar to that of Sturgeon lake and the Matawin river. Three portages, aggregating a little over a mile and a-half in length lead, by way of two small lakes, to the south-western arm of Minnitaki lake.

Sturgeon river.

After laying in a further supply of provisions at Sandy lake, Sturgeon river was ascended to the lake. From its outlet into Abram lake, the river is a succession of lake-like expansions, as far as the first fall and portage, a distance of ten miles. For this distance it follows the Huronian belt, the southern edge of the gneiss lying from half to three-quarters of a mile to the north all along and cutting some of the northerly expansions, the immediate contact being in low land without outcrops. About a mile below this first portage, development work has been commenced on a vein, four to five feet wide where exposed at the shore, in a mineralized quartz-schist band, a fissured and crushed form of the banded quartzose felsite. A shaft, sunk on this band close to the vein, was filled with water. The dump showed principally schist with irregular lenses of bluish quartz impregnated with iron and copper-pyrites. This vein is claimed to carry good gold values.

Dog river.

Just above the portage, a large tributary comes in on the right bank carrying perhaps a third of the water of the river. This branch of the river is known to the Indians as Dog river (Annimusibi). For the first nine miles from its mouth, the river lies in the granite-gneisses when it crosses an arm of Huronian felsites, diorites and schists which is probably a continuation of that crossing the Sturgeon river at the portage.

Portages.

Above this band the gneisses again come in. There are in all fourteen portages on the Sturgeon river, aggregating about two miles in length and showing a rise between Abram and Sturgeon lakes of about 160 feet.

Survey of Sturgeon lake.

On Sturgeon lake, the survey made by James Robertson, P.L.S., in 1900, was used, and attention was given only to the geology and to surveying tributary lakes and streams. The outlines of the gold-bearing Huronian were found to be irregular in the extreme and could only be fixed by traversing all the smaller lakes and streams in the neighbourhood.

Prospecting for gold.

Much prospecting work was done during the summer and many gold claims were located. On only about half a dozen of these had any development been done. On one location, owned by a St. Catharines syndicate, with the precipitancy so characteristic of the earlier years in the district, a five-stamp mill was erected and worked during part of the summer with good results in the amount of gold

extracted. Development was not, however, sufficiently forward and it was wisely resolved by the present manager, Mr. Smaile, to close down the mill and give all attention during the winter to sinking a shaft and further proving the property. Sturgeon lake mining Co.

On the location lying to the east of that on which the mill is situated, a vein has been partly uncovered in the schists. It has been traced at intervals by large bunchy outcrops of quartz for a considerable distance, in a direction about 15° E. of N. One of these bunches has proved phenomenally rich in nuggety gold at the surface. Owing to disputed ownership, only a little preliminary stripping has been done. Gold locations.

Another property on which extensive surface development has been done is the St. Anthony Reef, lying near the contact between the Laurentian and Huronian, a little south of the Dawson property, above referred to, and between Sturgeon and Couture lakes. There is here an arm of highly altered intrusive granite which, though not as far as seen connected with the main body of granite-gneiss, is probably genetically the same. Along the contact, a broad zone of shattered rock, upwards of 200 feet wide, is filled with secondary quartz in the form of small veins, lenses and stringers. Where an open cut has been made from the contact westerly into the crushed zone in the granite it is seen to be made up largely of quartz with the included minerals, zinc-blende, galena, chalcopyrite and pyrite occurring segregated in quite distinct coarsely crystalline masses. A pay streak with very high values has been partially traced out, and it is claimed that the whole mass is milling ore. In the schists, the vein contents are more evenly distributed and less coarsely crystalline. The contact between the green schists and the granite mass follows a very irregular course, and the vein, with a general strike nearly north, breaks away into the granite to the north and into the schists to the south, where the contact abruptly changes its direction. Sinking is being prosecuted, and the property is provided with engine house, power drills, &c., with the necessary buildings for the accommodation of the workmen and staff. St. Anthony Reef. Content of vein.

A little further down the shore, Mr. Symmes was doing development work on a vein that seems to be really a crushed band in the granite-gneiss close to the contact. The vein is generally narrow but swells into large pockets of mineralized quartz seven or eight feet wide. Argentiferous-zinc blende and galena, with pyrite and free gold, occur in the vein, the narrow, more vein-like portions being exceptionally rich. Locations.

Between the two last noted localities and near the same contact, on location 694 are seen veins running about N. and S. and E. and W. Location 694.

They occur in a somewhat felspathic green schist and have the lenticular character so common. Sufficient work had not been done to afford information as to their extent. They show visible free gold and

Location 207. native copper in small quantity. At location 207, the property of the Anglo-Canadian Gold Estates, considerable stripping had been done under the supervision of Mr. Girard on a vein running N. 10° E. through green schists, near their contact with an arm of highly altered granite. The vein is lenticular in character and varies in width from seven or eight feet to quite a narrow streak, and is in places rich in visible free gold. It follows partly the line of contact, but is better defined where it has the green schists on both walls. Pyrite, chalcopyrite and a little native copper also occur in this vein. On the

Belmore bay. opposite side of the Huronian belt, at Belmore bay, a number of properties have been taken up and some work has been done in the way of stripping and showing up the veins.

With the object of tracing further the Sturgeon lake gold-bearing belt, a northerly route was followed to the Albany river. Leaving the northerly arm of Sturgeon lake by a small brook entering ten miles north of the outlet and ascending the brook for two miles, a portage

Route to Musipomigut lake. of two miles led to a lake about a mile in length. From the head of this lake a portage of thirty-five chains took us to a long narrow lake extending north for over four miles, from which the large lake known to the Indians as Musipomigut and roughly indicated on existing maps under the name Savan lake, was reached by a quarter of a mile portage. A log-survey of the lake proved that there was little or no resemblance between the real lake and its representation on the existing maps. We found it to be a little over twenty-three miles in length in a direction about N. 20° E., having a central portion forming the main lake eleven miles long by five miles wide, with a number of bays of considerable length branching from it. The

Huronian belt. Huronian belt of Sturgeon lake was found to be continuous almost to the foot of the lake, the two arms, one running northerly to the outlet and the other north-easterly, extending into the granite-gneisses on either side of the central belt.

Description of lake. The lake is characterized by many shallow bays that are divided from one another along the shore-line by long and irregular rocky points, and at their heads, by areas of swamp. The central part of the the lake shows wide expanses of deep water, while the narrower parts and the bays are for the most part exceedingly shallow, long stretches having only a few inches of water covering a bottom of slimy mud. The forest growth is for the most part of small size and consists principally of black spruce, poplar and white birch, with occasional red and

white pine. This is the highest latitude (about 50° 35') in which I have observed the white pine in this district.

The Huronian rocks are of the usual kinds, with a large proportion of massive igneous types, and include a considerable thickness of schists, conglomerates and quartzites, similar to those that occur in the same belt at Sturgeon, Abram and Vermilion lakes. A drift-covered area or basin similar to those occurring in other parts of the district, occupies part of the shores and islands of the central part of the lake. The close resemblance of this drift area to that at Lac Seul makes it probable that they are similarly derived. That at Lac Seul seems to have been laid down at the foot of a glacial barrier that cut off the drainage to the north, and so formed a lake, basin between it and the higher land to the south. Pebbles in this drift contain fossils that seem to be of Devonian age and are probably derived from strata of that age, occurring to the north near Hudson's bay. The derivation of the drift about this lake is the more interesting as colours of gold have been obtained from it. A number of pits near the shore of one of the islands showed the work of the alluvial prospector during the summer. I could not learn authoritatively that more than a few colours had been obtained.

Drift basin.

Traces of alluvial gold.

Many smaller lakes were visited and surveyed during the summer, including a chain lying between the western end of Sturgeon lake and Sturgeon river. Of these the largest is known to the Indians as Kashapwaweigamok (Straight route lake), as it affords a short and easy route from Sturgeon river to English river and the railway. The lake lies within the granite-gneiss, only its extreme south-western bay reaching down into the Huronian, where it approaches the northern end of Jarvis lake on English river. This Sturgeon lake area was visited by a great number of prospectors during the summer, some of whom extended their field north to some distance down the Albany river, following the same belt of rocks.

Straight route lake.

Prospecting parties.

A well marked iron-bearing belt was noted to the north of Sturgeon lake, extending from the lake to the south of Musipomigut for some distance up that lake. No deposit of commercially valuable iron ore was seen, the outcrops being confined to very narrow bands of magnetite in the schist or very fine gneiss.

Iron belt.

Active work is being continued during the winter at the Shore property on King bay, at the Sturgeon Lake Mining Company's and at St. Anthony's Reef, as well as, probably, on a few others.

Mining in progress.

The Country West of Nipigon Lake and River.

Dr. Alfred W. G. Wilson.

Nomenclature of rivers and lakes.

In naming lakes or rivers in this report as far as possible an English translation of the name by which the water body is known to the Indians has been used. At present there is much confusion in regard to the nomenclature of many of them because different surveying or prospecting parties have given different names to the same body of water, without any regard to those used by the natives of the district. For example, on the field-map received from the Geological Survey office at Ottawa, there is a small sheet of water just east of Black Sturgeon lake, named Pike lake. On the map published by the Ontario Goverment this summer the same lake is called McKee lake. To the Indians, the lake is known as Kawawata or Northern Light lake, and the latter name is used in the present report. Again, the lake just east of this is Fraser lake of the Ontario map, Kahwahzehbemegog of the field map and the natives, and the Indian name is here translated Pleasure lake; Lake Elizabeth of the field map is called Susie lake on the Ontario map, and as the Indians have no name for this lake, priority holds and the lake is referred to as Lake Elizabeth in this report.

Work by Dr. A. W. G. Wilson.

On receiving a letter from the acting Director of the Geological Survey, dated June 17, 1901, intimating that I had been appointed to make a geological survey in the district south and west of Lake Nipigon, I reported to the Department personally in Ottawa on June 21st. Leaving Ottawa on June 26, I joined Dr. W. A. Parks in Toronto. Together we proceeded to Port Arthur, reaching that place on July 1, our steamer having been delayed by a storm on Lake Superior. After procuring the bulk of our supplies for three months, and engaging two canoemen in Port Arthur, we went to Nipigon station on the Canadian Pacific railway, where our canoes and camping outfits already awaited us. At Nipigon, Mr. Thomas M. Fyshe of Montreal, who was to act as my assistant during the summer, reported to me.

Assistant.

Parties separate at Lake Emma.

Moving into camp at the foot of Lake Helen on July 3, we commenced our ascent of the river the next day. On July 5 and 6 we were somewhat delayed by rains, but reached Lake Emma on July 8 where I parted from Dr. Parks, he proceeding up the river while I turned to the west through Lake Hannah. After making a track-

survey of South bay from Lake Hannah and examining the rocks in that vicinity, we crossed the Flat Rock portage to Lake Nipigon. Three days were spent surveying some small streams which enter South bay from the south, and in studying the geology around the bay. On July 12 we started for Chief's bay on the southwest side of Lake Nipigon, noting the geology of the peninsulas lying on either side of McIntyre, Grand, and Black Sturgeon bays. While in the vicinity of the Indian Mission on McIntyre bay, our Indian canoeman deserted, causing however a delay of only a few hours, as we were fortunate enough to secure the services of a much more efficient canoeman at the Mission.

Poshkokagan river.

On July 16 we reached the mouth of the Poshkokagan river and commenced a track-survey of that stream, beginning at the head of the first rapids. On July 18, having reached a point about two miles above the foot of the long rapids, and about eight miles from Chiefs bay, I left Mr. Fyshe in camp and proceeded with the Indian to the point were the Canadian Pacific exploration line crosses the river near Poshkokagan lake. Returning a short distance we proceeded up Lime creek, a tributary of the Poshkokagan from the south, for a distance of about six miles and then across country due east to the headwaters of Birch creek, another tributary of the Poshkokagan. Descending Birch creek we reached our camp on July 20. Returning to Chief's bay, a survey was made of several small brooks which enter that bay from the north. On July 25 we crossed to the Kabitotiquia and descended that river to Gull bay, studying the geology *en route*. On Gull bay a survey was made of a small lake and brook lying to the south of the east arm of the bay. From here we proceeded to Nipigon House to procure further supplies and to secure another canoeman, as the man then with us declared himself unable to work longer on account of injuries received some time before while portaging a heavy canoe.

Short surveys made.

Leaving Nipigon House on July 29 we proceeded to West bay to examine the geology in that vicinity, and thence down the west shore of the lake towards Black Sturgeon bay, making a survey of Flat Rock Point bay and studying the geology at several points *en route*. After spending a couple of days in the country immediately to the east of Black Sturgeon bay, we crossed the portage to Black Sturgeon lake. On reaching this lake the canoeman from Nipigon House became sick and practically useless. He was permitted to leave with a prospector and two Indians, a message being forwarded to the manager of the Hudson's Bay Company's store at Nipigon station asking that another man be sent. The company's agent kindly secured a man to come from that post to our camp on Black Sturgeon lake, and he

Delayed at Black Sturgeon lake.

joined us ten days later. The interval was spent by Mr. Fyshe and myself in studying the geology and topography of the country around Black Sturgeon lake, more particularly in attempting to work out the relations of the Laurentian and newer rocks immediately to the east of the lake, a number of traverses being made across the Laurentian belt.

Work accomplished.

On August 15 we were joined by the canoeman sent by the Hudson's Bay Company from Nipigon, and immediately proceeded to the portage leading to the head-waters of a small river which enters Black Sturgeon lake about the middle of the west side. On August 24 we returned to the lake, having reached a point beyond the western boundary of the map-sheet and having mapped seventeen small lakes (and connecting streams) on this system, the largest of which, Circle lake, is about three square miles in area.

Ascend Nonwatin river.

Descending the Black Sturgeon river, we reached Nonwatin lake on August 26, and on the 27th started to ascend the Nonwatin river, a swift and shallow stream with many rapids, making a track-survey of it along as we went. Being delayed somewhat by rains, we did not reach Small Trout lake, near the southern boundary of the sheet, until August 31. From this lake, trips were made to the south-west, ascending the Upper Nonwatin to beyond the boundary of the sheet and to the north-west as far as Small Trout lake on the Spruce river. From the south end of Small Trout lake we made a section directly east to the Black Sturgeon river, surveying Sucker lake near the head of Sucker creek *en route*. Returning to Nonwatin lake on September 9, a day and a half was spent in examining the country to the east of the lake. On September 12 we started towards the Nipigon river over a portage route leading from the foot of Nonwatinose lake to Northern Light lake and thence through Pleasure lake, Lake Elizabeth and a few smaller lakes to Lake Maria on the Nipigon river. Surveys were made of a few small lakes, and the northern boundary of the Laurentian area, which lies between Nipigon and Black Sturgeon rivers, was mapped.

Assistant returns home.

On reaching Nipigon station on September 21, I paid off the canoemen and Mr. Fyshe, the latter returning home on account of an injury to his knee. After spending two days in refitting and in engaging four canoemen, on September 25 I left Nipigon by rail for Sprucewood siding, near the Black Sturgeon river. Commencing at the Canadian Pacific railway crossing, we made a micrometer survey of the Black Sturgeon river as far as Nonwatin lake, reaching the latter point on October 3, having been materially delayed by snow and

sleet storms. From Nonwatin lake we proceeded to Black Sturgeon lake and commenced a micrometer survey of the Spruce river (upper Black Sturgeon), carrying the line to about three miles above Muskrat lake, on the north branch of this stream. Above this point the river is very narrow, and a long portage leads to a small lake at the head waters of this branch, but on account of the lateness of the season I did not think it advisable to ascend further. Returning to a point about three miles from Black Sturgeon lake, we portaged across to Small Sturgeon lake, on the south branch of the Spruce, and descended this river, which is chiefly a succession of rapids, to Black Sturgeon lake.

Mecrometer survey of Spruce river.

After spending a day and a, half in visiting Tchiatangs bluff on the east side of Black Sturgeon bay, Lake Nipigon, to study the relations of the rocks in that vicinity, and a portion of the day in visiting the belt of iron-bearing strata near the south-east east corner of the lake, we ascended the Spruce river to Small Sturgeon lake and commenced a micrometer survey of the upper part of the river, carrying the line up to and across the height-of-land and coming out on the stream which enters East bay of Dog lake from the northeast. The lateness of the season and a shortness of supplies rendered it inadvisable to attempt to reach Eaglehead lake and several other small lakes on the Eaglehead river, a small stream which enters Spruce river at a point about eight miles from Small Sturgeon lake. I determined to descend the Kaministiquia from Dog lake and reached Kaministiquia station on the Canadian Pacific railway on October 30. Returning to Port Arthur next evening, a day was spent there in settling accounts, and two days at Nipigon station in paying off the men and in packing up the outfit for the season.

Line run from Spruce river to Dog lake.

Geology of the Area.

The rocks of the country traversed during the season belong to the Laurentian, Huronian and Cambrian, the last mentioned being represented by the Animikie formation.

Geology.

Laurentian.—Beginning south of the southern boundary of the area, extending northward as far as Lake Maria, and reappearing from beneath the traps of the Animikie formation at several points (noted by Dr. Parks) above this in the valley of the Nipigon river, is a belt of Laurentian rocks, chiefly gneiss. The northern boundary of this belt curves south in the vicinity of Lake Maria, along whose western shore the gneiss occurs in a narrow belt. From the foot of Lake Maria it runs west and then northward to the foot of Lake Elizabeth. From

Area of Laurentian rocks.

here the boundary runs a little south of west, lying but a few chains north of the outlet stream from Pleasure lake. From near Nonwatinose lake a belt of Laurentian, varying from one to two miles in width, runs northward, appearing on the east shore of Black Sturgeon lake near the long point, outcropping east of the portage from Black Sturgeon bay, and reappearing from beneath the traps of the Animikie along the base of Tchiatangs bluff, which forms the eastern side of this bay. Similar rocks outcrop in a very narrow belt about one mile in length along the southeast side of Grand bay, and are also seen at Gneiss island in the passage between Grand and Black Sturgeon bays.

Western boundary of main area.

The western boundary of the main area of Laurentian is approximately marked by the Black Sturgeon river from Nonwatin lake to beyond the southern boundary of the sheet. The rocks consist of alternate belts of black micaceous schists and of pink to gray hornblende-biotite gneisses, moderately fine grained in texture. In the vicinity of Nonwatin lake and east of Black Sturgeon lake there is an area of pink to gray hornblende granite which frequently becomes a granitoid gneiss. The relationship of the granite and older gneisses is very complicated, so much so that at times it is difficult or impossible to determine any line of demarcation between the two.

Area of biotite-granite-gneiss.

To the southwest of the sheet, around the headwaters of the Spruce river, the biotite-granite gneisses, so well developed in the area of the Shebandowan sheet, were found uncovered around the shores of a small lake to the north of Ell lake, the main area occurring in the vicinity of Ell lake and from thence southward. The strike of the foliation planes of the gneisses and schists in the region preserves a uniform direction of about fifty-five degrees east of north, with variations reaching a maximum of about thirty degrees on either side of the normal.

Huronian.

Huronian.—Within the boundaries of this portion of the sheet there is but one small area which may be considered to belong to the Huronian. Commencing near the south-east corner of Black Sturgeon lake and extending south-east to the vicinity of Nonwatinose lake, is a narrow belt of highly ferruginous quartzite of an average width, so far as could be determined, of about four hundred yards. On the north-east, this quartzite band, whose beds strike N. 20° E. and are nearly vertical, is cut off by the granitoid gneiss belt referred to above, while on the southwest it is overlaid by later deposits. About half a mile east of Black Sturgeon lake, the quartzites are interbanded with a red hematite, sometimes quite soft, in bands rarely over a foot in width. The outcrop at this point is small, but from the topographic features of the vicinity one would expect that a much larger body of soft ore would be found in the valley near the outcrops, which are on the side of a steep incline.

Red hematite bands.

Further east, other small exposures of the ore occur, but the drift covering makes it impossible to determine their extent and value without considerable stripping. I understand that locations have already been taken up along this belt, although I was unable to find any claim-stakes in the vicinity of Black Sturgeon lake. Claims have been staked north of Nonwatin and east of Nonwatinose lake. No development work of any kind has as yet been undertaken, and the value of the belt has still to be proved. The ores which I have seen vary from a soft unctuous clay-like mass of bright red hematite to a hard ore, in which are frequently found small patches of sparkling blue-black hematite. I was informed that specular hematite in larger masses has also been found in this vicinity.

Claims said to be taken up.

Animikie.—The bed-rocks of the greater portion of the area belong to the Animikie formation. These rocks are of several types, that of greatest extent in the region I examined, being a deep red dolomite, frequently brecciated. It sometimes occurs in beds about 1 foot in thickness and then it is usually fine-grained and compact; at other times it is quite shaly and may then be coarser grained. Frequently it is yellow-spotted, owing to a partial reduction of the iron oxide, and occasionally small crystals of gypsum (selenite) are found. This dolomite is well exposed along the Black Sturgeon river below the lake of the same name, and along the Nonwatin river to beyond the borders of the map-sheet. Associated with these dolomites is a highly ferruginous dolomitic sandstone, best exposed along the valley of the Spruce river. This sandstone frequently carries large inclusions of quartz in angular masses. Both of these rocks occur in beds, which, near the Black Sturgeon river, are slightly inclined toward the south-west, and which, near the boundary of the sheet on the upper Spruce river, have a dip of five degrees to the east. Small outlying areas of the dolomites occur on the east shore of Black Sturgeon lake about two miles from the outlet, and also on the west and south shores of Northern Light lake. On the Upper Spruce river near the southern boundary of the sheet the red dolomites are conformably overlain by thirty-feet of a fine-grained greenish grey hard-shale, lacking slaty cleavage, and showing many fossil mud-cracks but no organic remains. This hard shale is capped in this locality, by fifteen feet of trap, and all three rocks dip to the east at an angle of five degrees.

Area of Animikie.

Associated ferruginous sandstone.

Outlying areas of dolomite.

A rock of very wide occurrence within the district is a fine- to coarse-grained extrusive, which, pending a microscopic examination, may be called trap. The trap rock, as it occurs in this region, is probably chiefly gabbro, though there are areas in which it shows a distinct diabasic structure. The trap frequently contains enough magnetite to

Large areas of probable trap rock.

seriously interfere with compass observations. The traps are found to cover the greater portion of the area between the Nipigon river and the Poshkokagan, and from Gull bay to the southern boundary of the sheet. To the south of McIntyre bay, the trap forms an almost continuous sheet. Westward in the vicinity of the Poshkokagan, Spruce, and Nonwatin rivers, it occurs in ridges and more rarely in isolated hills. Along the west side of the Black Sturgeon river, and near the upper Nonwatin and upper Spruce rivers, the trap, in a sheet varying in thickness from fifteen to three hundred feet, overlies the sedimentary beds, apparently conformably. In the vicinity of Grand bay and Black Sturgeon lake it is found to rest upon the Laurentian.

Modes of occurrence.

On the east side of the passage between Black Sturgeon and Chief bays and in the vicinity of Tchiatangs point on Chiefs bay are small exposures of a compact greenish dolomite in beds, varying in thickness from one to six inches and apparently resting conformably upon the trap, which is here very fine-grained at the contact. On the east side of Tchiatangs point, about two miles from the extremity, similar dolomites are found, apparently overlain conformably by a trap sheet which is here over one hundred feet in thickness. A lithologically similar dolomite is found in a position apparently overlying the trap and covering about six square miles on the southwest side of McIntyre bay.

Dolomite beneath trap.

Two sheets of trap.

In the front of the bluff along the south side of Grand bay is found a granophyric dyke, intrusive in the lower traps, but overlain by the traps which form the crest of the bluff. These two cases of trap sheets of considerable thickness, overlying other rocks closely associated with trap, suggest that there are at least two trap sheets of somewhat different ages in the region.

Along the southern part of Black Sturgeon bay and extending south as far as Black Sturgeon lake is a very narrow belt of sedimentary rock, chiefly sandstone. The lower beds at the south end of the belt are conglomeritic and contain a few fragments of the schists upon which they rest. At the northern end of the belt these sandstones are both overlain and underlain by trap. At the north end, where in contact with the trap, these beds dip at an angle of fifty-five degrees to the westward and strike N. 10° E. At the point of contact with the schists the dip is about thirty-five degrees to the south-west. In one place the sandstones in contact with the trap were found to stand at an angle of eighty degrees to the horizontal. On the eastern side of the Laurentian belt, which traverses this portion of the area, a somewhat similar sandstone occurs in positions varying from nearly horizontal to a dip of about sixteen degrees to the south-west. The sand-

Sandstones.

stones of this belt, which is nearly a mile in width, are almost free from iron oxide, are generally white, and are probably newer than the first extrusions Their aggregate area approximates eight square miles.

Dolomitic limestone.

In the valley of the Poshkokagan river, beginning at a point about eight miles from Chiefs bay and extending to within about four miles of Poshkokagan lake, are a number of exposures of almost pure white, occasionally reddish streaked and mottled, dolomitic limestone, readily sectile on the fresh fractured surface, but becoming hard on exposure to the air. The width of this belt is indeterminate on account of the covering of drift and forest, but from the topographic features, it is certainly five miles across and frequently somewhat wider. In the upper part of its course the Poshkokagan passes through a gorge about one hundred and forty feet in depth, cut chiefly in this dolomite.

Topography.

Dissected table-land.

From a physiographic standpoint, the country explored may be regarded as a partly dissected table-land. The best preserved portion of this table-land is found in the region south and west of McIntyre bay, where the flat-topped upland has a breadth of over three miles and consists largely of bare rock with a few small scattered areas of glacial sands, on which there is a growth of stunted jack-pine, black spruce or small poplar. In the west and south-west portion of the sheet, the dissection has proceeded much further, and the trap occurs in ridges and isolated masses between broadly open valleys. The trap caps the older sedimentary rocks, upon which it was extruded, and into which it has probably been locally intruded in the form of laccoliths. The more ancient depressions, now more or less blocked by glacial débris, have become the valleys of the present streams and lakes. The Black Sturgeon river, from the foot of the lake of the same name to within about three miles of the Canadian Pacific Railway crossing, flows along the front of a trap-capped cuesta formed by the dolomites and sandstones of the Animikie formation. On the east rise the older Huronian and Laurentian hills, occasionally capped by traps in the vicinity of Black Sturgeon and Nonwatinose lakes. The Nonwatin and Spruce rivers and their tributaries drain the cuesta outwards after the manner of insequent streams. These streams wander to and fro in broadly open valleys, occasionally cutting into bed-rock, but more frequently cascading over glacial boulders or meandering through glacial and alluvial sands. At the edge of the upland, the Spruce river descends nearly 400 feet in a long series of rapids over trap rock *in situ*, to the level of Black Sturgeon lake. The Nonwatin river, on

Character of valleys.

the other hand, descends from the upland over red dolomites. Both rivers, it will be noted, flow northward for the greater part of their courses, turning almost abruptly eastward when about four miles from the cuesta front.

Glacial deposits.

The valleys of the three principal rivers, the Black Sturgeon (and its tributaries the Nonwatin and Spruce), the Poshkokagan and Kabitotiquia, are more or less filled with deposits of glacial origin, either sands and gravels occurring occasionally as eskers or kame-like mounds, but more frequently as sand plains or extensive boulder plains. These latter, particularly in the valley of the Poshkokagan, cover an area more than 100 square miles in extent, forming a typical felsenmeer. Sometimes the boulders are found without a covering of any kind, but in the present case this occurs only in small areas. More frequently they are covered with moss and a dense growth of underbrush and spruce.

Economic Resources.

Farm lands.

There are a few small tracts, particularly in the valleys of the Nonwatin and Kabitotiquia, which are sufficiently free from stones and boulders to be considered fit for agricultural purposes. The areas are, however, small, scattered and difficult of access, and the region, as a whole, must be regarded as totally unfit for settlement.

Iron ore.

From an economic standpoint the country will prove to be valuable only for its timber and for the iron ores in the district near the Black Sturgeon lake and river. The uplands, for the most part, are bare or covered with jack-pine and spruce, or small birch and poplar, generally not large enough to be of any value. The valleys along the river are densely wooded, chiefly with spruce. In a number of areas, particularly on the higher ground and on glacial sand and gravel plains, we

Timber.

find poplar and birch and a few areas of jack-pine. In a narrow belt, rarely over a mile in width, along the valleys of the Poshkokagan and Spruce rivers, there are many very large white spruce trees. One of these, which I measured on the Poshkokagan, was eight feet in circumference three feet above the ground. There are small areas of red pine along the east shore of Black Sturgeon lake, and a few scattered white pines in the vicinity of the same sheet of water and the streams entering it from the west. Both the red and white pine trees are too few in number to be worth cutting except in connection with the other timber.

Burnt areas.

In the valley of the Poshkokagan, a belt of timber about a mile in width and about ten miles in length was burned over last year, all the trees being killed. During the present summer there was a large fire

in the region west of the Spruce river. The extent of the burned area could not be ascertained. In all about one-half of the region is covered with timber, which will be of value for pulp-wood, or for ties and piles.

At present the district is the hunting ground of the Indians from the settlement on McIntyre bay. Large game (moose, cariboo and black bear) seem to be abundant. During the summer, members of our party saw, besides the above animals, otter, fisher, mink, beaver, muskrats and foxes. Marten and lynx are also taken by the Indians. Game.

The Country East of Nipigon Lake and River.

Dr. W. A. Parks.

My instructions as received from Dr. Bell were to complete as far as possible, the geology and topography of that part of the Nipigon sheet lying east of the lake and river. Owing to the limited time and the rather inaccessible nature of the country it was thought advisable to make track-surveys only, and to tie these to the various exploratory lines which had been run in connection with the location of the Canadian Pacific railway and to the shores of Lake Nipigon. The Nipigon sheet embraces an area of the usual size adopted by the Survey (forty-eight by seventy-two miles). This includes the southern part of Lake Nipigon as well as the Nipigon river to within a few miles of its mouth. Nipigon lake and river divide the sheet into two almost equal parts; the eastern half was assigned to me, while Dr. Alfred Wilson received similar instructions regarding the western division. Instructions. Region covered.

The first work in this region was executed by Dr. Robert Bell with the assistance of Mr. Peter McKellar during the summer of 1869. Dr. Bell triangulated the western side of Lake Nipigon from South bay to the northern extremity, filling in the details with measurements taken by the micrometer telescope, while Mr. McKellar carried out a compass and micrometer survey of the eastern side. Both gentlemen made geological examinations of the shores of the lake and of the lower portions of some of the rivers flowing into it. The resulting map, on a scale of four miles to the inch, was published in the report of the Survey for 1869. At a later date Messrs. D. B. Dowling and Wm. McInnes made a survey of parts of the shores and of those islands which had been omitted in the above survey, and also a compass and micrometer traverse of some of the tributary streams. It will be seen that this left a large amount of work to be done in the interior before a sufficient knowledge of the geology and geography inland had been acquired to justify the issuing of the map-sheet. First survey of lake Nipigon.

Assistant.

During the summer I had the assistance of Mr. Gordon O'Leary, of Lindsay, who proved in every way satisfactory. In company with Dr. Wilson I left Toronto on June 27 and arrived at Port Arthur on June 30. Here we spent a day in obtaining men and supplies and on July 2 proceeded to Nipigon, where we completed our equipment and were enabled to start up the river the following day. Mr. O'Leary had not arrived by this time, so I thought it better to leave word for him to follow, as I desired to lose no time before getting the supplies over the long portages. I parted from Dr. Wilson at the portage below Lake Emma on July 8 and arrived at Rabbit falls the same night. The next day I was joined by Mr. O'Leary and we proceeded at once to Poplar Lodge at the mouth of the Sturgeon river, which point we made our headquarters for some time. Here I purchased a small bark canoe, as the large cedar one with which I ascended the river was much too heavy and clumsy for inland work.

Getting to our field.

Poplar point.

A small stream enters Lake Nipigon a short distance north of Poplar point. In order to ascertain the eastern limit of the Mungo Park trap area and to map the stream referred to, it was ascended to a point beyond which it was found to be entirely unnavigable. Returning from this trip, I had the misfortune to suffer a slight accident which forced me to remain at Poplar Lodge for two days. During this time I sent Mr. O'Leary to make a survey of the large lake lying north of Mungo Park point. This he accomplished and found that the waters of this lake discharge into Lake Nipigon direct, and not into the Sturgeon river, as indicated on former maps.

Sturgeon river.

On July 19, I started up the Sturgeon river but considered it unnecessary to make a survey of its lower part, as this had already been done by Mr. McInnes. On entering Cameron lake, however, I began a track-survey which was carried through to the upper waters of the Sturgeon river. A similar traverse of the Windigokan lakes was also made at this time. On July 25, I left the Sturgeon river and portaged into a chain of lakes which finally brought me to the Blackwater river. On ascending this stream it was found to flow out of a lake about three miles long. A track-survey was made of the lake and of the river to its mouth in Lake Nipigon. The stream is not travelled by Indians and no portages were cut out, hence it took us a considerable time to make the traverse and we did not arrive back at Poplar Lodge until August 1.

Blackwater river.

Various Huronian rocks.

The region, from the Sturgeon to the Blackwater river and for a few miles on each side of the sestreams, is occupied by various Huronian rocks, including sericite and other schists, altered porphyrite and quartz-porphyry, slate and, more abundantly, diorite, both massive and

in different stages of metamorphism. Agglomerates also are found at a few places. The dividing line between the agglomerates and the rocks below them might be drawn from the mouth of the Sturgeon river to a point north of the Windigokan lakes. Particular attention is due to this region as it contains, in places, ranges of schists passing into jasper and hematite. The strike is somewhat north of east in all cases and the dip variable but always near the vertical. Within the limits of the sheet there are, roughly speaking, three ranges with indications of iron*; one just north of the Sturgeon river and two south of it. Many claims have been staked on these belts, chiefly by the Flaherty and Clergue syndicates, both of which are actively and systematically prospecting the region. Mr. Flaherty has had a diamond drill working during the past summer on the first range south of the Sturgeon (the Sand river range). The jasper rock is here 1,000 feet wide and is filled with narrow bands of pure hematite. Its strike is 22° north of east and its dip northward 76°. The drill was driven down 542 feet at an angle of 60° from the vertical to the south, thus crosscutting the deposit. The core revealed continuous jasper with narrow bands of hematite and at the bottom a passage into quartzite. This belt has been traced, with some interruptions, to Little Long lake, a distance of 70 miles to the eastward, at which Dr. Bell mentioned the occurrence of iron ore in his report for 1870. North of the Sturgeon, the strike is about the same, but the average width is difficult to ascertain as the deposit is covered by the silt at the river banks. Slaty hematite, giving 40 per cent iron has been found at different places on this range. I was able to work out the geological conditions of occurrence fairly well and will be in a position to write on this point when the various samples have been examined. Jasper was observed at one place on the Blackwater river and magnetite was found south of Blackwater lake.

Three iron ranges.

Jasper rocks.

Iron at Little Long lake.

On August 2, I re-ascended the Sturgeon river to the Long portage and made an overland trip north, a distance of four miles, in order to locate the northern limit of the large trap area. The following day I started with a month's provisions to examine the chain of lakes lying south of the region above described. Long and rough portages are encountered in ascending the 800 or 900 feet of difference in level between these lakes and Lake Nipigon. Massive hills of trap mark the limits of the Animikie formation and much assisted me in mapping these rocks. Their extent was at one time much greater than at present, as evidences of denudation are very manifest and outliers are numerous, sometimes at considerable distances from the main mass.

Large trap area.

Hills of trap.

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* The iron ore of this region was discovered by Mr. Peter McKellar, assistant to Dr. Bell, in 1869. See Report Geol. Survey, for that year.

New lakes mapped.

It was found necessary to survey all the lakes of this chain, as existing surveys are extremely faulty and in places absolutely incorrect. Many trips inland were made and a large number of new lakes mapped. Particular attention was paid to locating the head-waters of the several rivers flowing into Lake Superior. The height of-land between the Nipigon and Superior waters lies a short distance south of the above mentioned chain of lakes. The streams flowing south have therefore, more than 1,000 feet descent in a distance of about 25 miles. This renders them very rapid and as the volume is small they are all quite unnavigable. The first ten miles of these streams lie on the uplands, hence lakes are more numerous and the canoe navigation facilitated thereby.

Rapid descent.

Pijitiwabikong.

On September 2 we returned to Poplar Lodge and removed our supplies to a point on Pijitiwabikong bay. The following week was spent in making overland trips in various directions from this place, the most interesting results, besides minor geographical features, being the locating of limestone under the trappean overflow at several places.

Overland to lake Superior.

On September 9 I instructed Mr. O'Leary to engage an Indian and take the large canoe to Nipigon station, while, with one man, I returned in the small canoe to the most south-easterly point reached in the previous trip. From this place we forced our way southwards, discovering a number of small lakes and one of considerable size known to the Indians as Abamichegomog. We were finally forced to abandon the canoe and to make our way overland to the railway. This country is extremely hilly and rough and consists of Laurentian gneiss, but a fringe of Huronian schist is met with before reaching Lake Superior. This trip resulted in the mapping of the Gravel and Cypress rivers and in proving the existence of a large area of excellent spruce timber. On returning from this expedition I paid off the Indian who had been with us all summer.

Long narrow valley.

With Mr. O'Leary, I went to the north end of Lake Sally, from which point a trip was made northward to connect with the one previously made from the south end of Pijitiwabikong bay. This revealed the fact that a narrow valley has been cut through the trap from Lake Nipigon to Lake Helen, as gneiss is found all the way from Pijitiwabikong bay to the latter. In order to survey the Jackfish river, we went overland, due east, until a stream was encountered which we followed to the railway. This proved to be only a tributary of the Jackfish. Another expedition was therefore made along the line between concessions II and III of the township of Ledger and it was continued a mile beyond the borders of the township, where the river was again found and it is thus located at four points, namely on two trial lines of the

Canadian Pacific Railway, at the point just mentioned, and at the junction of the affluent above referred to. These various trips revealed a large area of sandstone, limestone and shale resting on the gneiss and covered by the massive trap. The Jackfish river occupies a wide valley, eroded through the trap and floored at both its northern and southern ends with gneiss, with a wide belt of sandstone and limestone in the middle. It appears to me possible that at some past time the waters of Lake Nipigon escaped from the great chasm at Pijitiwabikong bay and found their way to Lake Superior through the well-marked valley of the Jackfish river.

Sandstone etc. under trap.

The lower part of the Jackpine river I was unable to explore, as my duties in Toronto demanded my return by the first of October. However, two streams were surveyed from the north end nearly as far as the southern boundary of the sheet. It is very likely that these two streams unite to form the Jackpine, as they lie in the proper place and would agree with the location of the river on the plans of the Canadian Pacific Railway.

Jackpine river.

I wound up the business of the expedition at Nipigon station and Port Arthur and, accompanied by Mr. O'Leary, arrived at Toronto on September 30.

The West Side of James Bay.

Mr. D. B. Dowling.

In the Severn district of the Hudson's Bay Company, which has now become the southern part of the District of Keewatin, there is a large region lying to the south-west of Cape Henrietta Maria that had never been geologically explored, and in which we were consequently unable to lay down the boundaries of the formations, even approximately. As this region occupies a very conspicuous position on our geological map of Canada, in course of preparation, it had become necessary to ascertain as much as possible during the season in regard to the distribution of the rocks in these parts. In addition to this, the west side of James Bay had not been surveyed, and as it was desirable to represent this shore on our maps with some degree of accuracy, it was decided to send a party to make a geological reconnaissance of the above region and a track-survey of the sea-coast in going to and returning from Cape Henrietta Maria. Mr. D. B. Dowling was entrusted with this work and was instructed to make an instrumental survey of the Equan river, the largest stream in the

Unexplored region.

Instructions.

region above designated, and track-surveys of as many other streams as could be executed; also a similar survey of Sutton Mill lake. He was likewise to make notes on the timber, soil, fauna, flora, climate and other matters in regard to the district. He was assisted by Mr. W. H. Boyd, of the Geological Survey, and attached to his party were Messrs. J. L. Biggar, of Toronto, and T. M. Papineau, of Montreal. Mr. Dowling reports as follows on the season's work:—

Assistants.

I left Ottawa May 30 and proceeded to Missinaibi, on the Canadian Pacific railway, to which the canoes had been shipped. In order to forward our supplies a 'half-size' bark canoe was obtained and four Indians were engaged to go as far as Moose Factory. As Mr. A. P. Low was going down the river at the same time, we travelled in company, and arrived at Moose Factory on the 17th of June. While there I hired a small sail-boat to carry us and our supplies to the mouth of the Equan river. Heavy north winds, which carried a large ice-floe into the bay, delayed us several days, but we managed to reach the mouth of the Albany river in safety, although we were enveloped in fog and rain most of the time. As directed by your instructions, I looked for gypsum between Moose Factory and Fort Albany, and found some loose pieces of it in the vicinity of Nomansland. It is quite likely that this mineral occurs *in situ* in the vicinity. After our experience in sailing along a shallow uncharted shore, I determined on securing, if possible, a guide at Fort Albany who would know the shore to the north, especially that part near the Equan or Ekwan river. Many of the Indians trading at Albany were from the region we were going to visit, and much useful information was obtained from them. One of their number (Patrick Spence), who lived on the coast near the mouth of the Equan, was hired as guide. After about five days of fruitless endeavour against a head wind, during which we made only about ten miles, we had a day of fair wind from the east and south which enabled us to run to the Equan river, arriving on the evening of July 8.

Moose Factory to Equan river.

As the Indians of this district cannot obtain bark to build canoes, they were poorly equipped in this respect, and finding that no canoes could be had, we did not divide our party, but with our two wooden ones began a micrometer survey of the Equan. This was continued for about one hundred and fifty miles from the coast, or to the mouth of Washagami river, which I ascertained to be in latitude 53° 48′ 52″. We then ascended this branch to the first lake, from which, by a series of long portages eastward, we reached a small stream that carried us to the south end of Sutton Mill lake. This we found to be in a deep valley trending north and south, with an average width of little over

Survey of Equan river.

half a mile. It is divided into two sections by a ridge of rock, consisting of horizontal beds of Cambrian age surmounted by a heavy trap overflow, similar in general appearance to those of Lake Superior. Through this, by a series of parallel faults, a narrow chasm, nearly blocked up by detritus from the cliffs, allows a small stream to flow from the southern to the northern part of the lake. A log-survey of this lake was made, and while I remained to complete this work and examine the rocks, Mr. Boyd was sent down the stream draining from its northern end, called Trout river, to make a traverse of its course to Hudson Bay. While at its mouth, besides latitude observations, he took a series of barometer readings to check the elevation of the lake.

Traverse on shore of James bay.

As the navigation along the Hudson bay shore from Trout river was reported difficult and dangerous, we both returned by the routes we had already traversed, arriving from the interior at the mouth of the Equan on August 22. Having but a short time to spend in this vicinity, I determined on making a quick trip northward along the shore as far as the weather would permit. A log-survey, checked by latitude observations, was made as far as the Opinnagow river. After being detained there by a storm from the north, and fearing a continuance of bad weather, we turned back on August 30, and arrived at the Equan again on September 3. Hiring our former guide, we started in the boat for Albany, but were detained by head wind at the southern mouth of the Attawapiskat river. A latitude observation which we took here confirms the position determined in 1886 by Dr. R. Bell which was questioned at that time, as it was much farther south than that given on the old maps and charts.

On September 6, we entered the Albany river on our return journey and paid off our guide. A storm from the north set in just after we arrived there. When we were ready to start, it had expended much of its force and by the moderated wind we were carried about half way to Moose river. A period of calm weather with light south and south-west winds then set in and we reached Moose river on the evening of September 11. The tide was running out, so we waited till 9 p.m. for it to turn and then we beat in to the Inner Ships Hole by 10.30 p.m. In the afternoon we saw the barque 'Hans,' a chartered vessel, leaving on her run out of the bay. The Hudson's Bay Company's vessel, the 'Lady Head' was still at anchor in the river, ready to start, but she did not leave till about September 15.

Return by Moose river.

The Moose river we found to be very low, but before we left for the south a heavy rain set in for three days, for which we were thankful, as the delay at Moose Factory would be balanced by an increase in the

depth of the river which would facilitate our travelling. On the 18th, we left Moose Factory, but soon found that we were obliged to wade for long distances in the shallow water. Owing to the very dry summer, a forest fire had been raging in the valley during the latter part of August and up to the middle of September. This was found to extend from the mouth of the Mattagami river south-westward on the Missinaibie to the Skunk islands. My instructions directed me to make a track-survey, if possible, of the Opazatika river when on my way home; but as this stream flows through part of this burnt area it was especially shallow, and we were satisfied that our canoes could not be got up it without very heavy labour and a loss of more time than we could afford, so we returned by the Missinaibi, arriving at the railway on October 15.

General description of mouth of Moose river.

The delta at the mouth of the Moose river is divided into three channels which enter James Bay. The northern one runs from north of Middleboro island to the north-west of Ship Sands, but it is nearly dry at low water and is also impeded by large boulders, so that it is not used except by canoes and small boats. The southern channel is also reported to be shallow. The central channel which runs along the south edge of the Ship Sands, shoals to seven feet at low tide, and vessels pass at high water after being lightened to draw about twelve feet.

Moose river to Albany river.

Northward from the outer bar to North point, the water is very shoal but it deepens slightly to Nomansland. The low-tide flats are not very wide but the bars project from many of the points for long distances at Long Ridge point and Cockispenny point. At Halfway point, limestone fragments are pushed up along the shore from rock apparently *in situ* below tide. Long Ridge point is built np mostly of gravel with a few boulders showing on the surface. From Nomansland to Albany river the shore is very flat and at low tide the mud flats extend out for several miles.

Mouth of Albany river.

The Albany river, like the Moose, is divided at its mouth into three channels. The trading establishment and mission are situated on an island on the north side of the southern channel. North of this island is the broad opening called locally North river. This has at its mouth a long bar similar in position to the Ship Sands at Moose. The southern entrance to this is the larger, and its entrance seems to be much deeper than the channel going to the settlement. The small channel north of the bar is shallow at low water and has a bar outside on which we found a depth, at high tide, of very little over one fathom. Very shoal water, in which boulders appear, extends northward beyond Nottashay point and boats are obliged to keep nearly out of sight of

land to escape the shoals. Chickney river, which enters north of the Albany, is said to be another channel from the latter.

Coast northward.

Shoals were observed, well out from shore to near the Kaypuskow river. In the inner water between Akimiski ('Agoomska') island and the mainland there seems to be a maximum depth of about two fathoms. This shoals gradually to one fathom at a distance of three miles from either shore, as observed in tacking back and forth in latitude 52° 54' 0". The mainland here is generally without a beach and between the woods and the tide-line is a wide flat covered with grass. The north-western part of Akimiski island approaches the mainland much closer than is shown on the maps and a number of sboals are scattered from this point to the point south of the Equan river. The boat channel, according to our guide, runs to the west of the two islands which here lie off the shore. The position of the mouth of the Equan river according to several observations is in latitude 53° 14' 0".

Northward from the Equan, the shore, for a long distance, is flanked by high gravel bars, but at low tides a broad belt of mud extends out several miles, so that travelling along this coast with canoes is very unpleasant should the time of high water be in the middle of the day or night. Landing on the beach without a long 'carry' through the mud is only possible at high tide.

Streams south of Cape.

The rivers that enter the bay between Equan point and Cape Henrietta Maria are not large and, as the former maps are mere sketches, it is difficult to locate those which are not known by a local Indian name. The first stream north of the Equan is a small channel said to be a branch from that river. It is marked by two gravel bars to the north about a mile from the beach. Swan river, which is perhaps Raft river of the map, enters in latitude 53° 36'. It is in a slight bay or curve in the shore line. In latitude 54°, the shore takes a curve to the west, forming a point and as the tree-line curves to the north-west from here, this is probably Point Mourning, the first wooded point south of Cape Henrietta Maria. Several small streams flow into the above bay. The first is called by the Indians, Nowashe river—the next Patchipawapoko — then the largest along this coast, the Opinnagow, followed by the last stream Nikitowasaki, fifteen miles north of the Opinnagow. The latitude of the mouth of Opinnagow river by observation is 54° 12' 24".

The bay to the south of Cape Henrietta Maria is shallow and muddy with wide mud flats, but near the extreme eastern end of the cape, the shore is reported to be bolder and limestone beds are said to outcrop

at high tide mark. These are probably continuations of those found on the Equan and Attawapiskat rivers to the south-west.

Timber.

The timber along the coast gradually becomes smaller as we go northward and the tree-line recedes from the shore, leaving it finally at the Opinnagow, so that the country behind the cape is more or less an open plain. The shore, where the trees are at a distance from the beach, is generally an even mud slope, covered above high tide with grass, followed by a wide belt of stunted gray willows which look somewhat like the sage bush of the western plains. Behind this, a few isolated spruces of small stature appear before the tree-line is reached. In sailing along this coast, it is impossible to know which way to steer so as to run parallel to the land as nothing is to be seen ahead by which to shape one's course.

Tides.

The tides along this narrow shore are not regular in their amount of rise and fall, which is determined, in a great measure, by the direction and strength of the wind. From Equan river northward, the high tide appears to be about six and a half hours after the moon's meridian passage—the flood and ebb running seven and five hours respectively, while to the south of the shallow ground between Akimiski island and the mainland, the flood comes from the south and is much earlier. High tide at Lowasky river occurs at between two and a half and three hours, and at Albany about the same. The flood tide at Lowasky river runs four hours and the ebb eight. At Albany the flood runs five hours and the ebb seven. At the outer bar at Moose river the tides are from half an hour to an hour earlier.

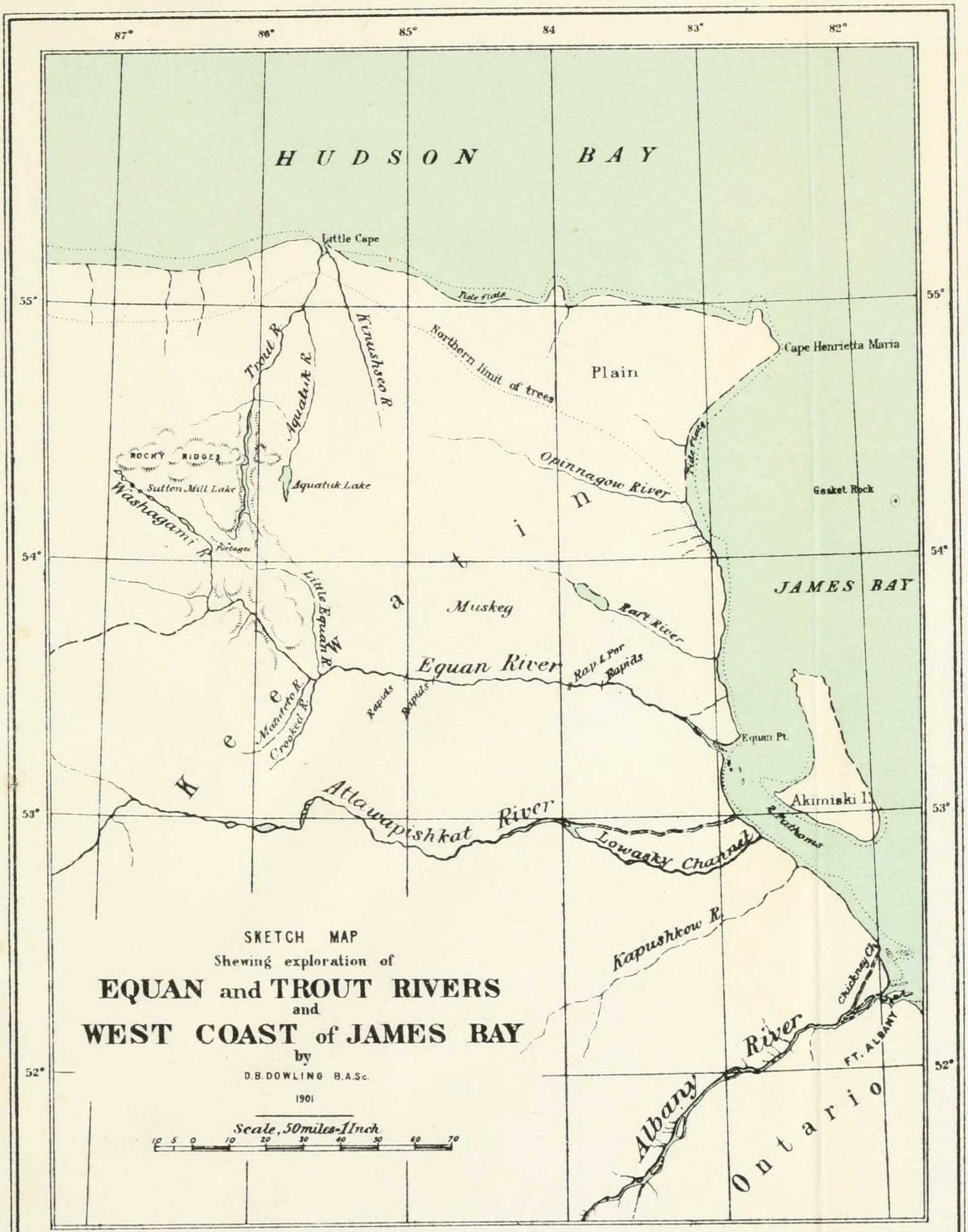
Equan river.

The general course of the Equan river, from the junction of the Washagami or Clearwater river is toward the east-south-east. It emerges from a plateau above the mouth of the Little Equan river, in a wide old valley and then flows eastward over a sloping plain to the sea. In the latter part of its course, it is cutting down a new valley through marine clays which cover the underlying rocks to a depth varying from twenty to fifty feet. From the lowest rock exposure to the sea, the current is swift and it is constantly moving a large quantity of gravel towards its mouth and into the bay, into which the stream empties. Shoals and gravel islands at its mouth bear evidence of this transportation. Nearly horizontal limestones are met at intervals in the section which lies between the fortieth and one hundredth mile from the sea. From a series of fossils collected in these rocks, it would appear that they are older than the Devonian and are probably of Silurian age.

Above the Little Equan, as noted before, the river issues into a wide valley from a higher plateau, but this valley gradually narrows before

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Drawn for photolithography by O.E. Prud'homme.

To accompany Annual Report part A Vol. XIV.

the Washagami is reached, and cut-banks of clay, higher but somewhat similar to those in the river below, occur at many of the bends. These clays contain marine shells such as *Saxicava rugosa*, *Macoma calcaria*, *Mya truncata* and *Cardium ciliatum*. These were also found at the highest point at which the clays were seen, about 390 feet above tide. The fall in the river from the mouth of the Washagami, as given by our barometer readings, is about 290 feet. North of this to beyond Sutton Mill lake, is a plateau at an elevation of nearly 400 feet above tide, through which, in latitude 54° 20′ rounded or oval domes of trap protrude to a height of from fifty to one hundred feet. Through the plateau, a deep narrow valley has been eroded in a north and south direction, which is now occupied by the waters of Sutton Mill lake. At the lake, the surface of the clay plain is 390 feet above the sea and the surface of the water is 290 feet above the same level.

Marine clay.

Soundings show that the bottom of the southern part of the lake is 310 feet below the plain and that of the northern part 250 feet below the same surface. It was known from the map published long ago by Arrowsmith that a tract of high and broken ground (compared with the generally level country) existed to the south-west of Cape Henrietta Maria. This tract had been assumed to be Laurentian and it was so coloured on former geological maps, but in my instructions from Dr. Bell he predicted that the rocks of this area would more likely prove to belong to the same series as those of the Manitounuck and Nastapoka islands, on the east side of Hudson Bay, which are of the same age as the Animikie of Lake Superior ; and my examinations of the region proved this surmise to be correct.

Elevation of marine plateau.

Silurian limestone is found on Trout river, draining Sutton Mill lake, as well as in the bed of this lake just north of the trap rocks. The rocks at the narrows of the lake, described on the maps as 'high and romantic,' are cliffs one hundred and fifty feet in height of trap, capping horizontal beds of probably Animikie age. The trap overflow covers the uneven surface of these rocks, in much the same manner as at Nipigon bay on Lake Superior. The underlying rocks are dark slates impregnated with iron ore and interbanded with beds of jasper. Some of the beds seem to contain a high percentage of magnetite and hematite. On the east shore a section of about ninety feet of these jasper and iron-bearing slates is exposed above the lake, but on the west side they have been brought down to below the water level by a series of north and south faults and the exposures there are of the trap alone. These rocks form an east and west ridge reaching to the upper lakes on the Washagami and eastward to a large lake on a

Rocks of Sutton Mil lake.

Iron ores.

branch of the Trout river which, as before stated, drains Sutton Mill lake and runs to the north.

The slates and jasper, or jaspillite, beds form a long anticline, whose axis runs east-and-west and the majority of the beds exposed belong to the northern slope of the anticline. This ridge is terminated on the lake by a series of north-and-south faults with downthrow to the west of unknown amount. The overflow of trap appears to have been at a later date, as there seems to be some unconformity at the base of the trap, the flow having filled all the inequalities in the underlying surface. The cliff at the west side of the narrows is of trap, one hundred and fifty feet high, with none of the jaspillites showing beneath it. On the east side, however, ninety feet of these beds are exposed with a varying thickness of trap above them.

Section.

The following rough enumeration of the arrangement of the beds below the trap is given, but as no careful examination of the rocks has been made, it is to be considered as only provisional :

At the top, in contact with the under surface of the trap, is a series of black, gray, and greenish slates with many of the upper beds impregnated with magnetite. At eighteen feet down, red jasper streaks begin to appear and the first narrow band is quite crystalline, so much so, that it resembles an eruptive porphyry. In the next two feet, very thin beds or streaks of jasper are interleaved with the slates, but they become much thicker below. The jasper beds are seen to be made up of minute oval and rounded concretions of bright jasper separated by a matrix of chalcedonic quartz. As the colour depends on the percentage of these jasper pellets the colour of the beds ranges from light-red to brown. Thin bedded dark rusty rocks form the majority of the beds to about thirty feet down, where several heavy beds of jasper occur. Below this to forty feet, the beds are mostly of dark grayish and black semi-crystalline rocks with fewer red streaks, but they are more heavily charged with magnetite than those above, and some of the thin beds appear to be wholly of magnetite. A covering of talus conceals the slope to about seventy feet down, but, in this space, fragments which lie about, indicate dark iron-bearing slates or quartzites of high specific gravity. In the lower part of the section, the rocks are of a coarser crystalline apparance and the lowest bed, or that exposed at the water level, is heavy with magnetite.

Trout river.

The valley of Sutton Mill lake widens out at the north and its discharge flows at first in an old wide valley and then gradually forms a newer channel for itself. In going north, the timber gets small and disappears before the shore of Hudson bay is reached. The mouth of

this river is placed by several latitude observations by Mr. Boyd at 55° 16′ 09″.

Along the streams there is a narrow fringe of timber, but in approaching the tree-limit this becomes very small. Back from the immediate slopes of the rivers the surface is nearly level and moss-covered, with scattered groups of small spruce and tamarack. The greater part of the interior is reported to be muskeg (open bog). A small collection of about forty species of shore plants was made at the mouths of the Equan and Albany rivers. Interior.

The principal fur-bearing animals of this district are foxes, otters and beavers. Of the larger mammals, few appear to be obtained by the Indians. In the interior the game birds are all very scarce, the fall hunt for ducks and geese being confined to the shores of the bay. The rivers afford a small supply of whitefish. The streams running to the north into Hudson bay in this region are, at certain seasons, well stocked with speckled trout. Sutton Mill lake is well supplied with a slender variety of lake trout and at the narrows, speckled trout were also caught. Game.

Western Part of the Abitibi Region.

Mr. W. J. Wilson.

I beg leave to submit the following report of my explorations in the vicinity of Lake Abitibi, Nipissing District, Ontario, during the past summer.

I received instructions from you 'to determine the extent, etc. of the Huronian rocks to the north-west and north of Lake Abitibi, along the Abitibi river from the outlet of the lake downward as far as may be necessary, say to the Long Sault rapids or Frederick House river, southward of the lake to explore and make a survey of the Abitibi river which falls in southward of the Post, and of any natural features possible in that region, west as far as Night Hawk lake and south to the Height of Land or Round lake.' Instructions.

On June 10, I left Ottawa accompanied by Messrs. J. F. E. Johnston of this department, T. A. Davies and H. F. Lambart. We proceeded to Abitibi post by way of Temiskaming lake and the canoe route from Quinze lake to Lake Abitibi, reaching the latter lake on June 23.

Mr. Johnston, following your instructions, made an examination of the country lying to the east of the Interprovincial boundary, and he

will report directly to you on the result of his explorations. He was accompanied by Mr. Lambart.

After storing our supplies in the Hudson's Bay Company's warehouse which Mr. Robt. Skene kindly placed at our disposal, and securing a guide, I came south on the canoe route, over which I had just passed, for the purpose of examining the country south of Lake Abitibi. Maps of this region represent a river as flowing from the south-west and joining the stream flowing from Agotawekami lake, a short distance north of the latter. The Indians told me there was no river there, and subsequent investigation proved this information correct.

Abitibi river south of lake.

In passing along the canoe route, the opening looks exactly like the mouth of a river, but it is only a long winding arm, and has not even a small stream flowing into it. Abitibi river, therefore, flows directly from Agotawekami lake. It receives two small streams from the west, about three and five miles long respectively, but they are not passable for canoes except in very high water.

I learned from the Indians that there is a canoe route west from Obadowagashing lake through a series of rivers, lakes and portages round to Agotawekami lake.

Beginning at the north-west bay of Obadowagashing lake I followed the river flowing from Labyrinth lake a distance of about four miles.

Canoe route west from Obadowagashing lake.

There are two short portages on this river and several exposures of a hard fine-grained greenstone containing, in most places, small grains of pyrite. There are also two small exposures of vitreous tuff. Close to the river the banks are low and are composed of clay, but a short distance back the land rises in low undulations to a height of 50 to 100 feet.

Forest growth.

The country is thickly wooded with spruce *(Picea alba* and *P. nigra)*, poplar *(Populus tremuloides* and *P. balsamifera)*, balsam or fir *(Abies balsamea)*, canoe-birch *(Betula papyrifera)*, cedar *(Thuya occidentalis)*, tamarack *(Larix Americana)*, pine *(Pinus Strobus, P. resinosa, P. Banksiana)*, and numerous shrubs as alder, willow, American yew, mountain maple *(Acer spicatum)*, rowan, sweet gale and a great variety of small flowering plants and ferns.

Labyrinth lake.

Labyrinth lake is irregular in shape, about four miles long and three broad. It contains numerous islands which are well wooded but rough and rocky, the rock being compact greenstone containing small quartz veins holding pyrite. Wherever the rock is exposed, especially near the water level, it is polished smooth and heavily striated. The course generally is south to S. 20° W., with stossing on the north. A few granite boulders were noted but no boulder clay. The Indian name of this lake is Kwaskonadaga.

Continuing the survey westward I passed through a low marshy river for two miles, then through a small grassy lake called Waterhen lake, then for a mile and a half up a river where a portage of nearly a mile leads into a lake called Wawagoshe, and from this a portage of a quarter of a mile passes over the Height of Land to the head waters of the Blanche river. The elevation where the line crosses the Height of Land is about 980 feet above sea level (aneroid). In passing over the portage into Wawagoshe lake, I noted some comparatively large trees, especially spruce and poplar. Some of the spruce measured sixty-seven inches in circumference, but west of the middle part of Wawagoshe lake the forest is all second growth, the country having been overrun by fire about thirty years ago.

Height of land.

The branch of the Blanche river which forms a part of the canoe route is a very small stream near the Height of Land, but at a distance of a mile and a half it has become twenty feet wide and six feet deep. At a distance of four miles it expands into Snake Island lake, and a mile further into Misemikowish or Beaver House lake. This is a narrow deep lake extending west and north-west seven miles with an arm running south six miles. The shores are high and rocky, the rocks consisting of massive diorites and schists with numerous small quartz veins holding pyrite. The rock itself contains considerable pyrite in disseminated grains.

Diorites and schists.

Structural lines which may represent the strike run nearly east-and-west with the dip ranging from 75° to vertical. In places, however, the lines run north-and-south. A ridge of dolomitic rock containing iron forms a dam across the south end of the lake, causing a fall of about five feet. The branch of the Blanche river flowing south from this lake is a stream of considerable size, and I was told by the Indian guide that it is twenty to twenty-five miles long. There is a canoe route westward from Misemikowish lake to Round lake, also one leading north across the Height of Land. I followed the latter over a portage of two chains into a narrow lake one mile and a half long, then up a small stream one mile long, two small lakes, a short portage and a lake two miles long to the Height of Land portage. As already noted on Wawagoshe lake the forest growth is all small, consisting chiefly of spruce, canoe-birch, poplar and Banksian pine, the latter eight inches in diameter. This is the character of the forest growth to the south end of the Height of Land portage, where the *brulé* ends, and west probably to Round lake.

Second growth.

A portage of half a mile crosses the Height of Land, then a number of small streams and lakes which form the head waters of the Isabemagussi river were followed for over three miles. Here the canoe route

leaves the main stream which is blocked with driftwood, and a portage of two miles connects with another branch of the river. This I ascended for three miles when a lake two miles long was reached. From near the north end of this lake a portage of three miles is necessary to again reach the Isabemagussi river, which is now flowing east to Agotawekami lake, about twenty-two miles distant. All the rocks along this route are Huronian, and consist of greenstone and schists, with an occasional band of chert and conglomerate. The latter was seen on the last long portage one mile from the south end; strike N. 70° E.

Huronian conglomerate.

The forest growth is generally heavy and was well seen on the long portages where there are swamps densely wooded with tall, clear spruce ranging from six inches to one foot in diameter. On the higher ground the soil is a deep clay loam and vegetation is very luxuriant. Spruce, twelve to twenty inches in diameter is common, and poplars measuring two feet were seen; canoe-birch and other trees grow to a fair size.

Isabemagussi river.

The Isabemagussi river at the north end of the Three-mile portage is fifty feet wide and seven feet deep, but the marks on trees, etc., along the banks show that when the ice is moving out, the water is at least ten feet higher than at present, (July 10). The soil along its banks is a sandy bluish-gray, stratified clay, resembling that found everywhere south of Lake Abitibi. The water is muddy, but some of the numerous streams it receives are clear and cold. Very few rock exposures are seen, but wherever they do occur they show the same Huronian strata striking east-and-west. From the appearance of the soil and the luxuriance of the forest growth and vegetation generally, it is clear there is a large area of excellent land for agricultural purposes on this river and its branches, also considerable quantities of pulpwood and saw-logs.

I next made an examination of the country south of Lake Abitibi, going up the rivers for that purpose. The first river ascended falls into the lake about twelve miles west of the Hudson's Bay Company's post. It is called Madawanasaga because there are two main branches which meet near the lake. For the first five miles there are no rock exposures, the banks being low and in places marshy. The first rock seen in place is a purplish-gray, rusty weathering dolomite, and a short distance farther up the river there is a much altered greenish rock which is changing into serpentine. A similar rock was found four miles further south, and at a rapid where I turned back the ordinary greenstone of the country occurs. This river was surveyed for eleven miles, when it became too small for canoes, but the guide said it extends seven or eight miles farther flowing from the south-west.

Serpentine.

The next river that can be ascended by canoes enters the lake west of the large peninsula called by Mr. M. B. Baker, Cauliflower point. The stream he has named Lightning river, the Indian equivalent being Animikewabid. About six miles from its mouth the river divides into two branches of equal volume, but neither of these can be traversed for more than a mile, as they are blocked by numerous jams of drift-wood and fallen trees. The branches extend inland to the south-east about five miles. A little over two miles from the mouth of the river there is an exposure of greenstone holding pyrite in disseminated grains. Near the fork the rock is the ordinary greywacke.

Ghost river.

The last river examined on this shore empties into the lake in the south-west part and has been named Ghost river by Mr. Baker; the Indian name is Manitouskosi. This river is one hundred feet wide at its mouth and flows through a flat, clay country, as far as examined, about eleven miles. It continues several miles farther, flowing through more elevated ground. It also receives a large branch from the west. The only rock seen on this river is a small exposure of greenstone at its mouth. Like the other rivers examined on this shore of the lake the banks are composed of well stratified clay which contains considerable quantities of sand, making the soil a sandy loam. Near the numerous streams this is of excellent quality, and from the appearance of the ground as seen from the surrounding hills there are large areas of good soil throughout the whole district. There are several hills rising to a height of four to five hundred feet above the level of Lake Abitibi and one or two probably higher, but the country generally is rolling and affords good drainage. Small poplar, spruce and fir are common on the lower ground and sides of hills, and scrubby Banksian pine on the top of the hills, but none of these are of much economic importance.

Stratified clay.

Abitibi river.

I next went down the Abitibi river, which was examined as far as the intersection of Niven's meridian line, below the Long Sault rapids. A micrometer survey was made of it from Niven's line to Speight's tie line, below the Iroquois fall, thus connecting with the micrometer survey made by Mr. Speight from that point eastward to Abitibi post in 1900. The first obstruction is four miles and a half from the lake at Couchiching falls, where the river passes over an altered greenstone in a succession of falls and rapids, the total descent being about 46 feet (aneroid). From this fall to the Iroquois fall there are numerous exposures of rock, all of Huronian age, consisting of greenstone, chloritic schists, and in one place an impure dolomite. These cause several rapids, which are passed by short portages. The strike varies considerably, but in a general way is nearly east and west. At

the Iroquois falls the water has a perpendicular drop of 15 feet or more, and would make an excellent water power. The rock here is massive greenstone, which extends for a mile and a half below the falls; then for two miles it is mixed granite and gneiss, alternating with the more basic rocks. The contact between the Huronian and Laurentian is evidently in this vicinity, but, as in so many other places, there is no sharp line separating them. For the next five or six miles to Buck Deer rapids occasional exposures of granite and gneiss were seen, striking N. 70° to 80° W., dip. S. 10° to 20°, W. $<50°$-70°. From the Buck Deer rapids to the head of the Long Sault rapids, a distance of twenty-eight miles, there are no rock exposures, but there are numerous gneiss and granite boulders in the bed of the river and along its banks. Examinations were made on both sides of the river, but no rock was found. The Long Sault rapids are caused by ridges of gneiss which cross the river at this place, and good exposures are seen for over five miles. From this point to the crossing of Niven's meridian line no rock was seen.

Contact between Huronian and Laurentian.

The Abitibi river for the whole distance examined has low banks of stratified, sandy clay, rising above the water level from five to twenty-five feet, but in a few places, as at Buck Deer rapids, the banks are higher and somewhat rugged. The soil close to the river is of good quality, but back some distance it becomes in places wet and swampy. The forest is composed of spruce, poplar, balm of gilead, fir, cedar and numerous shrubs. Close to the river the trees are of a fair size, but soon become much smaller.

An examination was also made of the Mistoogo river, a branch of the Abitibi. It joins the latter from the north about ten miles above the mouth of Black river. Less than a mile from its mouth a ridge of chloritic schist, striking N. 80° W. and dipping N. 10° E. $< 75°$, causes a fall in the river of 18 feet (aneroid). This schist contains small veins of quartz, and Mr. R. W. Colthard says that a picked sample assayed in gold $2.20 per ton.* The low state of the water prevented my going far up this river, and the only rocks met with were schists and greenstone of Huronian age. A day's walk into the woods showed large areas of good soil covered with an abundant vegetation but no rock exposures.

Mistoogo river.

The water of Lake Abitibi is muddy during the whole summer. This is true of all the rivers flowing into it as far as examined, and of Abitibi river. The lake being very shallow, the whitish sediment carried down by the rivers or washed from its own clay banks does

*Survey and Exploration of Northern Ontario, 1900, p. 45.

not get time to settle, as the wind constantly agitates it. This adds a considerable element of danger to canoeing on any of these waters, as it is impossible to see boulders or other obstructions if only a few inches below the surface, By February the water in the lake becomes clear. Muddy water.

I next ascended the Black river, the largest branch of the Abitibi, above Frederick House river. Its mouth is twenty-nine miles below the lake and its water, being dark and comparatively free from muddy sediment, contrasts strongly with that of the Abitibi. A micrometer survey was made of this river for forty-nine miles and a track-survey for some distance farther. The river at its mouth is about three chains wide with little current and continues about the same width for about seventeen miles to the first fall. In this distance only two small exposures of rock are seen, both greenstone holding pyrite. About seven miles up the river a stream enters from the east. A portage from near what is called Old Woman rock on the Abitibi river, connects with this branch passing through a small lake. This route is only used by Indians when hunting, as the portages are very long. Nine miles from the mouth, the forest was destroyed by fire four years ago, and for about five miles there is nothing standing but dry stumps of trees, with an occasional clump of green trees along the river and in swamps. The burnt area extends eastward about ten miles, but I did not learn how far to the west. Black river. Burnt area.

The fall above referred to is over a massive greenstone with numerous veinlets of quartz and disseminated grains of pyrite. The total descent here is about fifteen feet and the fall would make an excellent water power. A half-breed family named McDougall have a neat house and small clearing at this point, where they have planted a patch of potatoes which promised an abundant crop. An average stalk measured forty-two inches in length and some of the potatoes were a good size.

The following is a report on soil collected at the above place. Latitude about 48° 38′ and Longitude about 80° 27′.

'A sandy loam of a dark grey colour and showing a considerable amount of vegetable fibre, from fragments of roots and bark chiefly. There are no pebbles and the soil appears to be in an excellent mechanical condition, due no doubt chiefly to its comparatively speaking, large proportion of vegetable matter. Analysis of Soil.

Analysis of (air dried) Soil.

Moisture	1·86
Organic and volatile matter	9·73
Insoluble residue (clay and sand)	79·96
Oxide of iron and alumina	7·67
Lime	0·45
Magnesia	0·44
Potash	0·36
Phosphoric acid	0·11
Carbonic acid, etc. (undetermined)	
	100·58
Nitrogen, inorganic matter	0·227

Available Constituents.

A determination of the amounts of phosphoric acid, potash and lime soluble in a 1-per cent solution of citric acid, and consequently to be considered as more or less immediately available for plant use, yielded the following data :—

	Per cent.
Phosphoric acid	·0192
Potash	·0142
Lime	·376

This soil appears to be very well supplied in all the essential elements of fertility save phosphoric acid—which latter is somewhat below the average found in our better and more fertile soils. In humus and nitrogen it may be said to be particularly rich, though no doubt much of the latter is not present in a condition immediately available to plants. Considered from the physical as well as the chemical standpoint I should expect this soil would prove one of very fair productiveness, provided climatic conditious were favourable.

FRANK T. SHUTT, M.A., F.C.S.
Chemist, Dominion Experimental Farms.

Huronian rocks.

In ascending the river for the next eighteen miles, there are many exposures of Huronian rock, mostly massive greenstone and schists. These rocks are generally pyritous, and they also contain many small veins of quartz and epidote. At the second portage there is a dyke-like mass of hornblende granite with green schists on both sides, and at the fifth portage, twenty-nine miles up the river, there is a mass of greenish breccia. These rocks frequently cross the river in ridges and cause falls and rapids, necessitating altogether eight portages in the first thirty-five miles. In this distance the rise is about 150 feet (anero'd). At the seventh portage, thirty-two miles up, there is a fall of forty-six feet, and thirty-five feet of this is an almost perpendicular

fall at the head of the portage. This could be utilized for a water power. At the eighth portage, three miles farther up, the descent is thirty-five feet, the chief part of this being over a series of cascades at the upper end of the portage. For seventeen miles above the eighth portage, the river flows through a flat country showing few rock exposures, and there is no further obstruction to navigation in that distance. Several branches of considerable size flow into the main stream in this stretch, and the river beyond becomes gradually smaller. Fifty-two miles from its mouth where we turned back, it is twenty-five feet wide but too shallow to float an empty canoe (August 29). It was also blocked at short intervals with fallen trees. The Indian guide informed me that the river continues eastward for about fifteen miles with numerous branches; also, that at about half this distance there is a perpendicular fall much higher than any we had passed.

The country round the head waters of Black river.

Near the fifty-second mile I ascended a bare hill 120 feet high, from which an unobstructed view of the surrounding country was obtained. To the north, north-west and west it is comparatively level with an occasional hill rising 100 feet above the general surface. To the north-east, east and south the country is much more rugged. There are several bare rocky hills within a radius of four or five miles, while in the distance much higher blue peaks appear. All the rocks seen in these hills are Huronian greenstone, strike N. 45° E., dip S. 45° W. $< 70°$. The forest, as seen from this hill, is all second growth, except an occasional clump of trees that escaped the fire which swept over this region thirty years ago. The northern boundary of the burnt district crosses the Black river about thirty-three miles from its mouth, and extends southward beyond the Height of Land and eastward close to the head waters of the Isabemagussi river, and, I presume, connects with a similar second growth already mentioned as occurring on Misemikowish lake and vicinity. The Indians did not know how far the burnt area reached to the west, but said it was a long distance. Canoe-birch and poplar from one to four inches in diameter are most common, while small spruce, fir and many shrubs are abundant with Banksian pine on the rocky hills and sandy ridges. Along the Black river the areas which escaped the fires are covered by a heavy growth of spruce and poplar, which will yield a large quantity of saw-logs and pulpwood. The soil along the river is a clay loam of excellent quality, and as far as could be learnt, it extends over portions of the lower part of the whole district. There are, however, many wamps and sand plains.

Good soil.

Route to Round lake.

The route south to Round lake leaves the Black river forty-one miles from its mouth and follows a winding branch, White Clay

river, to Kekekwabik lake and thence to the Height of Land through small streams, lakes and portages. The stream, which I have called White Clay river, is known by a long Indian name which means 'flowing through white clay.' The name is very appropriate as the soil is composed of a whitish clay mixed with a large quantity of sand. Three miles from Black river there is a fall of twenty feet over greenstone dipping S. 80° E. $<10°$–15°. The fall is passed by a short portage on the west side. There are two more portages before reaching Kekekwabik lake with exposures of rock of Huronian age. This lake is six miles south of Black river, in a straight line, but following the sinuosities of the river, it is more than eight miles. On the west shore of this lake there is a steep rock composed of breccia conglomerate. The magma is of a dark green colour and the pebbles are granite, quartz and many small fragments much resembling the mass of the rock. They are angular, sub-angular and rounded, and vary from the size of a pea to 20 inches in diameter. Nearly half a mile south of the steep rock above referred to, a reddish-brown breccia conglomerate occurs, and this gradually merges into the more common greenish variety. On the east shore near the north end the ordinary greenstone is seen and a little to the south a beautiful quartzite or arkose rock occurs, and near the south end of the lake there is a reddish coarse felspathic agglomerate. On a small lake a few chains west of Kekekwabik lake and parallel to it, breccia conglomerate again occurs similar to that already described at the steep rock, The dip is N. 70° W. at a high angle. On a small lake a mile to the east there is an exposure of a very fine black fissile slate. Strike N.W., dip vertical. Continuing south, the river for about a mile is deep and sluggish flowing through a marsh. Here a stream enters from the west draining Swan and Gull lakes. To the south the stream was so small at that season (Sept.) that we had to carry the canoes and luggage most of the way to the Height of Land. After crossing three portages and two small lakes, a branch of the Blanche river, flowing from Sesekinaka lake was reached. I followed this stream to Kinogami lake and thence to Round lake, making a track-survey to the former and a micrometer survey of the remaining distance. Between Kekekwabik lake and Kinogami, the rocks are all Huronian greenstone, schists and slates striking nearly east-and-west. The soil is poor except some small areas along the river, and the forest growth is valueless from an economic standpoint as it is all small second growth. Kinogami lake is over five miles long and one mile broad. Huronian rocks consisting of a fine-grained greenstone, breccia conglomerate and reddish quartzite are seen at different points along its shores. Five miles east of Kinogami lake in a straight line or seven and a half by the river at

Breccia conglomerate.

Blanche river.

Kinogami lake.

the first portage, there is an exposure of conglomerate containing jasper pebbles. There is also a band of dolomite fifteen inches wide holding a considerable quantity of iron. Strike N. 75° E., dip vertical. A mile and a half farther down there is a lake a mile long known as Kapikokonaka lake. From this a portage of nearly a mile is necessary to avoid rapids and beyond this there is no further obstruction except from fallen trees and driftwood. Three miles and a half north of Round lake, in a straight line, there is an exposure of a hard reddish syenitic rock composed chiefly of felspar and hornblende; the same rock is seen at several places farther down the river and the last outcrop is only a short distance above the lake. The dip is S. 10° E. < 60°. The river where it enters Round lake is a chain wide, and the lower part is comparatively straight with clay banks and some good land.

Syenitic rock.

I returned to the northern part of Otto township and made a track-survey of a small winding river flowing into the Blanche seven miles north of Round lake. This stream drains a large number of lakes; the largest, called Anikojigami, is four miles from its mouth. The rocks up to this lake are greenstone and breccia conglomerate, holding jasper pebbles. The latter is well seen at the fourth and fifth portages, where the magma is of the ordinary dark-green colour and the pebbles are abundant and varied, being mostly well rounded. In fact some of the rock is composed chiefly of pebbles, with just enough of the matrix to hold them together. The pebbles consist of granite, quartzite, greenstone and jasper. On one small surface I counted seven jasper pebbles some two inches in diameter. The strike is N. 20° E.; dip vertical. The hills rise to a considerable height on both sides of this river, but slope gradually back. The banks, where not rocky, are composed of a whitish sandy clay. Anikojigami lake, as its name implies, is a collection of lakes joined together by narrow passages. It is more than eight miles long, with narrow winding arms. The shores are usually high and rocky, with a stunted second growth of poplar, canoe-birch, Banksian pine, etc. The rocks are the ordinary Huronian greenstone and schists, as are all those on a number of small lakes to the east and north. Eastward there is a canoe route to Misemikowish lake, which I followed four miles, making a track-survey. The last lake examined on this route is called Kaminamekoka, and is a beautiful sheet of water over two miles long. The height of land is one mile and a quarter directly north of Anikojigami lake, where there is a small lake from which the water flows both north and south. We followed the stream flowing north to Kawanaska lake, from which a stream flows directly to Black river.

Jasper conglomerate.

Height of land.

Sesekinaka lake.

Coming back to the southern part of Anikojigami lake, a canoe route was surveyed to the west, coming out where we first reached the Blanche river on our way to Round lake. There are four lakes on this route and as many portages. The largest lake, called Sesekinaka, is three and a half miles long and full of islands clustered together. On the first small lake west of Anikojigami there is an outcrop of a granitic rock, and exposures of the same rock occur for nearly two miles west. The strike is N. 70° E. Huronian rocks are found elsswhere on this route. Some areas have escaped the fire of thirty years ago and these are covered with a heavy growth of spruce, poplar, canoe-birch, fir, red pine and red maple *(Acer rubrum)*. This is the only place I have seen the red maple in the whole district.

I returned to Abitibi post and spent some time in trying to make an examination of the north shore of Lake Abitibi and the rivers flowing into it from that side, but owing to heavy storms and high winds, I found it impossible to accomplish much. This shore has, however, been examined and well described by Mr. Walter McOuat* of this Survey and others.†

Indian relics.

On Lower Lake Abitibi, at the east end of the portage, across the peninsula from the south, I found a number of interesting Indian relics. They were lying on the sandy beach, covered at ordinary high water, and consisted of several pieces of pottery, showing five or six different patterns of ornamentation, part of an arrow head, several knives and scrapers, gun flints, a stone axe and numerous flint chips. The pottery seems to have been made from the clay and sand contained in the bank at this point. Close to the bank there are hard baked, irregular masses four or five inches thick which seem to be of the same material as the pottery. Stone knives and scrapers were also found on Black river at the mouth of White Clay river and on a point in the southern part of Agotawekami lake, and a perfect arrow head on Kapikokonaka lake, in Otto township.

Glaciation.

The whole country examined shows evidence of heavy glaciation. This is seen in the transportation of boulders, the general rounded appearance of the hills, and especially in the smooth, polished and striated rock surfaces so frequently met with. The latter is best seen in the lakes, on the shores of islands and rock exposures in the rivers at or near water level. When the rock is wholly exposed to atmospheric action the surface has been so changed by weathering that striæ are rarely preserved, but when the surface is covered for a por-

*Report of Progress Geol. Surv. Can., 1872-73, pp. 126, 127.

†Report of the Survey and Exploration of Northern Ontario, pp. 46-48

tion of the year the glacial grooves and lines are very distinct. There are two general courses. The latest, which is by far the most common, varies from south to S. 20° E. Ast. and an older set running from S. 20° W. to S. 35° W Ast. That the direction of the ice was from north to south over the Height of Land there is most conclusive evidence. The stossing is invariably on the north side, as is well seen on the islands in Abitibi and many other lakes. Many buff-coloured limestone boulders, similar in composition and colour to the rock found north of the Sextant rapid, sixty miles from Moose Factory, were found on Lake Abitibi, and also at the Long Sault rapids. These boulders contain typical Devonian corals and they were evidently carried by the ice from the above mentioned Devonian belt.

Boulders containing Devonian fossils.

The whole country examined is frequented by fur-bearing animals, which form a means of livelihood for the Indians. Each Indian has his own hunting-ground and it is said they are careful not to trespass on each other's property. A good hunter will secure furs to the value of $400 in one winter, but many do not exceed $200. The principal animals hunted are moose, caribou, deer, bear, fox, wolf, muskrat, marten, lynx, otter, weasel, beaver, mink, ermine, skunk, porcupine, fisher, and rabbit. Moose were very plentiful on the head waters of the Blanche and Black rivers, especially the former. Fresh tracks were frequently seen in the soft mud along the streams and their paths were common and well beaten through the brush. The Indians say that the wolves are increasing alarmingly fast, and they fear if their rapid increase is not checked they will exterminate the deer and other animals. They are sometimes successful in their attacks on the moose, especially the young ones. Fish of various kinds are numerous in all the lakes and rivers, and many species of birds were seen during the summer.

Game.

From my observations in this district I am convinced that there are large areas of agricultural land of excellent quality, especially in the river valleys, the soil being in most cases a clay loam, free from stones and easily cleared. The climatic conditions also seem favourable for farming operations, and these would improve with the clearing and drainage of the land. Out of a collection of nearly seventy species of plants from this district, Professor Macoun says there is only one which indicates a cold climate and that was found in a peaty swamp. When it is remembered that Lake Abitibi is farther south than the southern boundary of Manitoba it will be seen that there is nothing in the latitude to prevent the successful cultivation of the soil, and further, it has been practically proved for many years that vegetables of all kinds can be successfully grown at Abitibi post.

Rich agricultural land.

Climate.

In the collection of plants above referred to, there is a black-fruited Crætagus, which is probably a new species.

Dead tamarack.

Raspberries and blueberries were frequently met with, though they are not plentiful. High bush cranberries are common along the streams, and the Indians report several bogs where low bush cranberries are abundant. The tamarack is everywhere dead, and though an occasional tree has a few green leaves, I did not see a vigorous tree the whole summer. In certain localities a considerable percentage of the spruce is also decaying, and I noted many cedars with the foliage from one-third to one-half dead.

Mr. Skene gave me the following dates as the opening and closing of Lake Abitibi :

Opening.	Closing.
1898, April 11.	October 28.
1899 " 28.	November 11.
1900 " 30.	" 11.
1901 " 11.	(Not received.)

The first frost at the post this fall (1901) was on September 25.

I may state that Mr. T. A. Davies, who accompanied me the whole summer as assistant, did his work in a very efficient and satisfactory manner.

I have to thank Mr. O. E. Taylor, Mattawa; Mr. B. M. Miller, Ville Marie, and Mr. Robert Skene, officers of the Hudson's Bay Company, for much valuable assistance and many kindnesses, especially Mr. Skene, who did everything in his power to aid me in my work.

Eastern Part of the Abitibi Region.

Mr. J. F. E. Johnston.

Instructions.

In accordance with your instructions I left Ottawa on June 10, and proceeded in company with Mr. J. W. Wilson to the Hudson's Bay Company's post on Lake Abitibi, this point having been decided upon as the best depot from which to make a geological and topographical examination of that portion of the country lying to the east of the regular Hudson's Bay Company's route from Lac des Quinzes to Abitibi, northward to latitude 48° 45′, and east and south as far as could be got over in the time available.

SKETCH MAP
of the
LAKE ABITIBI REGION
to accompany Summary Reports by
W.J.WILSON Ph.B.
and
J.F.E.JOHNSTON C.E.
1901
Scale 16 miles to 1 Inch

The post was reached on Sunday, June 23, and the following day was spent in arranging outfit, securing guides, &c. One of the men engaged to help us to get our outfit in from Quinze lake to Abitibi and who had been over a considerable portion of the country to be examined, was engaged to act as guide and canoeman. He found, however, that he would be unable to join us for eight or ten days. Accordingly, on the next day, with Mr. H. F. Lambart, of Ottawa, as assistant, and one Indian, I left for a short side trip to Agotawekami lake, to examine any brooks entering on the east side with a view to finding a practicable route into the lakes which had been already surveyed by Mr. John Bignell, P.L.S., of Quebec, on the south-eastern side of the height of land. A good sized brook, coming in one-third of the way down, was ascended to a point where it was found to be completely blocked with fallen timber, and had to be abandoned. I then struck across through the bush to the height of land, but did not find any way to get through with a canoe, nor were any rock exposures encountered. The timber consisted principally of excellent white spruce and poplar, the former having an average diameter of from nine to eighteen inches, while some of the latter was large, a few of the trees having a thickness of two feet near the butt.

Assistant.

Timber.

We then returned to Abitibi to meet the guide and, although we waited a couple of days over the time agreed upon, he failed to appear. We, therefore, secured a small bark canoe and two Indian boys (it being impossible to persuade any of the men to come) and started up the Amikitik or Whitefish river which enters Lake Abitibi at its north-east corner about four miles and a half from the Hudson's Bay Company's post. As this trip was to be over entirely new ground, a micrometer survey was made of the stream and of a good sized lake drained by it. The lake is situated about twenty-eight miles from the mouth of the stream.

Whitefish river is a sluggish, dirty brown stream five chains in width at its mouth and varying from three to five chains up to Makamik lake at its head. It is about twenty-five feet deep at seven miles from its mouth and fifteen feet at two miles below the lake. It is fed by numerous good sized creeks and flows through a flat country. The shores are thickly wooded and low, and the soil along its banks is a good clay loam. In ascending the river, the first break in the smooth water occurs twelve miles up, where there is a chute and rapid with a total fall of about thirteen feet. Three-quarters of a mile further, there is a slight rapid falling one foot and in less than a quarter of a mile another chute and rapid occur with a fall of fifteen feet. Four miles and a quarter further on we came to the biggest rapid and chute on

Whitefish river.

the river with a fall of thirty feet. Two other small rapids occur within the next three miles and a half, with a total fall of about four feet and from this to the lake is dead water.

Huronian. The first rock exposure met with on the Whitefish river occurs two miles from Abitibi lake and consists of Huronian biotite schist. Three miles higher up is a small exposure of biotite gneiss and from there till Makamik lake is reached, the only rocks met with are altered diabases and mica and chloritic schists, striking in a general way, about east and west. Ancient glacial action is very evident along the river and the striæ are well defined.

Makamik lake. Makamik lake, at the head of this river, is approximately six miles and a half in its greatest length and its extreme width is about six miles. In general direction it lies nearly north and south with one large bay to the west and two to the east. The water is very shallow and although we sounded it in a good many places, the greatest depth we found was five and a half feet with clay bottom and the high water mark is only three feet above this. The shores are heavily wooded with white spruce, white and black poplar, balsam, white birch, a few black ash and near the water some excellent cedar.

It is fed by three fair sized streams, one of which enters the lake at the extreme southern end (which we afterwards ascended) and two others coming in close together on the eastern shore. The two latter are about 100 and 150 feet in width respectively and possibly are two mouths of the same river. There is also another brook entering the lake on the western shore, called by the Indians Ogassassan ; we examined this brook later on.

General course of Whitefish river. Whitefish river, the outlet, leaves the lake at its most northerly point and flows, in a general way north-west for fifteen miles, then swings round and flows in a southerly direction to Lake Abitibi. The rocks on the northern shore of Makamik lake resemble those on Whitefish river, but on the southern side we found altered granite, biotite schist, granite and gabbro. The general strike is from about east-and-west to north-east and south-west with a northerly and a north easterly dip respectively. Most of the rocks are well striated.

Guides desert. The morning after completing the survey and examination of Makamik lake, we found on awakening that the two Indian boys had left during the night, taking the bark canoe and leaving us with one shallow 17 foot canoe to carry our whole outfit and three men. This of course prevented me from doing any further micrometer work, but as it was very desirable to reach the head waters of the Whitefish river it was decided to ascend the stream entering at the south end. A time

traverse was made of this river and the lakes at its head, carefully checked by astronomical observations for latitude. The magnetic variation was also observed as frequently as possible.

In ascending this river, which is about three chains wide at the mouth, we travelled almost directly south for nearly seven miles, south-easterly for nine miles, when we swung round and travelled a little south of west for over two miles. This brought us to the next lake, which is entered about the middle of its north shore. At the mouth of the river between Makamik lake and this one, there is a peat bog, but its extent is small. The river maintains the same width approximately, to within about three miles of the lake, when it gradually widens to about seven chains, narrowing again to about three chains where it leaves the lake. The water is very muddy at the mouth, but gradually becomes less so higher up and at the head it is comparatively clear. The bottom is clay and the soil on either side clay loam. The shores are well wooded with white spruce, white and black poplar, balsam, tamarack and black ash and a good deal of Banksian pine.

Peat bog.

Several brooks enter on either side, but they are all so choked up with fallen timber that it would be impossible to go up them in a canoe. The first rapid occurred about seven miles and three quarters from the mouth, it was about nine chains long and had a fall of twelve feet. Here there is an exposure of massive gray granite, well striated, and the same rock is seen at the next two rapids, the first of which is a little over a quarter of a mile farther up, falling about five feet and the second seven chains further still, with a fall of fifteen feet. One mile and a quarter more brought us to a fourth rapid falling about six feet and here the rock, which is very much disturbed, is an altered diabase. One more rapid has to be passed before reaching the lake and this is the one of greatest fall. It is about two miles and three-quarters above the last mentioned, and consists of a chute and a rapid about sixteen chains long with a fall, according to the aneroid, of thirty-five feet. The same altered diabase crops out again here. For the last three miles before reaching the lake, the shores are very marshy, covered with alder in places, and occasionally running back into tamarack swamps. Just before reaching the lake, however, the shores become tree-covered to the water's edge and the river narrows again. Our progress up this river was somewhat slow, as all our portages had to be cut out and, having only one Indian and my assistant, this took considerable time.

Exposure of massive gray granite.

The lake at the head of this river is a very pretty one. It is about two miles and a quarter long, half a mile wide, and lies almost exactly east-and-west. The extreme western end and the extreme eastern where the inlet occurs, are somewhat marshy, but the shores of the

rest of the lake are wooded to the water's edge with white spruce, white and balsam poplar and cedar. To the west and south-west the ground begins to rise almost from the water's edge, up into the low hills forming the height of land. The depth is ten to twelve feet and altered diabases, striking in a general way east-and-west, are the only rocks met with, except on a small island, a quarter of a mile from the inlet, where a volcanic breccia is exposed containing slate pebbles, pyrite and a pseudomorph probably siderite after pyrite.

Volcanic breccia.

Ascending the inlet, it gradually widens out into another lake of a marshy character for the first mile. It is on the same level as the last lake, and beyond the marsh it is a beautiful sheet of water with a total length of about eight miles and a half and an average width of from half a mile to a mile. Looking up the lake from its outlet the main axis would be a little south of east for seven miles, when it turns sharply to the north, in which direction it continues for a mile and a half further. About the middle it narrows to a quarter of a mile and is studded with islands, some seventy in number. Nearly every point on the lake shows rock exposure. The water is dark in colour but not muddy, and the average depth is about sixteen feet. As I was unable to find any Indian at Abitibi who knew these waters and consequently could get no name for them, we called the lake for descriptive purposes, Lake Lois.

Lake Lois.

There is an exposure of breccia near the western end, and all the other rocks seen are altered diabases and greenstones. The rock is everywhere rounded by glacial action and well striated. The strike varies from about north-east and south-west to east-and-west. The shores are well wooded with the same timber we had seen all along. Two creeks enter the lake at its eastern end and both of these were examined as far up as we could get, but a mile or so from the mouth of each, the water was found to become very shallow and the brooks choked with alder bushes and fallen timber. We then followed their courses by walking through the bush to see if there were any more lakes on this route, but they both seemed to rise merely in marshes or swamps. A quarter of a mile north of the long northerly arm, at the east end of Lake Lois, another small lake was found. Its longer axis trends north-east and south-west; it is a mile and a half long and one-eighth to one-quarter of a mile wide. A portage was cut to the lake, of which a traverse was made. The rocks and the timber on this lake resemble those on Lake Lois. It is ten feet higher than the latter lake and its outlet, which is at the north end, is a very small brook running in the opposite direction from Lake Lois. This satisfied me that Lake Lois is the source of the river emptying into

Makamik lake and is consequently one of the head waters of Whitefish river. We now returned to Abitibi post over the same route by which we came, and on our way examined Ogassasan brook, already mentioned, for a couple of miles, when it became completely choked with wood. One mile and a quarter from its mouth there is a chute falling three feet, and here chloritic schist, striking south-east, is exposed. Return to Abitibi post.

We reached the post on the evening of August 5, and as Mr. Wilson and myself had agreed to meet August 15, to arrange about going out together at the end of the season, I decided to use the interval in again trying to find a route into the lakes on the south-eastern side of the height of land. Two or three days were lost by very bad weather, but on the 9th we went up to Agotawekami lake and, after a careful search along the east shore we found a brook coming in about four miles above the one we had tried previously, and this proved to be the route required. It is rather difficult to find, as the mouth is hidden in marsh, and at twelve chains up, the brook widens out again into a very shallow marsh, in which the water was so low that we had to pull the canoe through by wading. We followed a number of sections of this brook alternating with marshes, portages and small lakes till we crossed the height of land into Lake Kajakanikamak, which is practically at the same level as the last lake on the Hudson bay side of the watershed. This lake is about one mile and three-quarters long in a general south-easterly direction from the end of the portage, and about one-eighth of a mile wide. A couple of exposures of greywacke were seen and about half way down, one of conglomerate. On completing the examination of this lake I returned to Abitibi to meet Mr. Wilson, and having arranged with him to meet again at Klock's depot on Quinze lake on October 15, I started back to Kajanikamak and continued the exploration to the eastward. Lake Kajakanikamak.

The lakes in this part to the east and south had been already surveyed by Mr. John Bignell, P.L.S., Quebec, so that the topographical work for the remainder of the season consisted merely of minor track-surveys up small brooks and between lakes previously located. Lakes surveyed by Mr. John Bignell, P.L.S.

Leaving Kajanikamak lake at its south-eastern end, a little over two miles of very bad brook travelling brought us to Kakameonan lake, which is about six miles in length and varies from half to three-quarters of a mile in width, lying in a general direction north-west and south-east and with a bay near the middle of the north-east shore running north-east for about a mile and a half, out of which it discharges. Kakameoman lake.

Like all the other lakes in this district, the shores of Kakameonan are well wooded with aspen and balsam-poplar, white spruce, balsam-fir, tamarack and an occasional pine. The rocks seen were greywacke, chert, a breccia with flinty felspathic quartzite pebbles, altered diabases and a hard, compact, light-gray Huronian rock. The brook which is the outlet, joins the west branch of the Kinojevis river about six miles above the junction of the latter with the east branch. Altered diabase is exposed a quarter of a mile up the west branch above the brook, and a mile and a half beyond this slate is seen. Below the outlet of Kakameonan there are no exposures on the west branch which flows over clay and is from sixty to a hundred feet wide. Ascending the east or main branch, which is from three to four chains wide, there is a swift current four miles up, and at five miles altered diabase was seen at a rapid.

Rock exposures.

Several exposures of slate and graywacke were seen before reaching Kabakwobia lake, a small expansion of the river about two miles long. A short stream fr m the south, a mile long, connects it with Kawbaswakaminikatay, a round marshy lake about a mile in length, and a badly choked creek connects the latter with Kawinakwisakwi-daw about four miles to the south-west. About half way up the creek, between the second and third lakes, there is a fall of about eighteen feet with an exposure of chloritic schist. On Kabakwobia lake, schists, slate and greywacke are seen and the shore is well wooded with poplar, spruce, cedar and balsam.

Carcajou river.

In ascending the Kinojevis from the forks, we travelled in a general easterly direction as far as Kabakwobia, then northerly for about four miles when we swung round easterly again. On the river just above this lake there are a few elms, but for some distance after this the river runs through an old *brûlé* with second growth of small white birch and poplar. About twenty miles above Kabakwobia a small stream, known as the Carcajou river, enters from the north, and between Kabakwobia and this stream we passed two more small rapids, the first of which falls about twenty feet and the second two or two and a half feet. The rocks met with along this stretch are greywacke, greenstone and altered diabase holding considerable pyrite disseminated through it in small cubic crystals. We went about three miles up the Carcajou, which is a muddy stream, badly choked in places with fallen timber. Chloritic schist, striking about north-west-by-west is seen on this river at a small rapid. Returning to the Kinojevis, we found that three-quarters of a mile further up, the river forks into two large branches, one known as the Nawapitechin or North river, coming from the north, and the Kewagama from the south.

Forks of Kinojevis river.

The North river was examined as far up as we could get, a distance of about thirty-five miles. Twelve rapids, all small, varying in fall from one foot to six feet with a total descent of about twenty-seven feet, were passed in this distance, after which the river narrowed to a very small stream choked with alder. The soil is clay-loam and the shores well wooded the greater part of the way. On the lower part of the river the timber consists principally of spruce and balsam poplar with some aspen. Further up, the poplar becomes scarce and spruce and jack pine are the principal woods. The river is very crooked and in ascending it, the general direction is nearly north-west for two-thirds of the way, when it swings round nearly south for five or six miles and then nearly west again till the end of canoe navigation is reached. North river.

The rocks on this river are somewhat varied, greenstone carrying some pyrrhotite and giving indications of the possible presence of nickel, occurring about five miles up the river, while two miles beyond an altered granite is exposed. Within the next mile and a half, greenstone is seen again and also chloritic schist. An outcrop of light-gray altered granite is seen at intervals for about two miles beyond this, and gives place to a very hard cherty rock containing small specks of chalcopyrite associated with greenstone, and further up the river, as far as we managed to ascend, greenstones were the only rocks seen. Rock exposures.

Having completed the examination of the North river, a return was made to its mouth and we proceeded up the Kewagama some five miles to a lake of the same name. This river flows over clay with good clay loam on its banks, which are well wooded with spruce, balsam and white poplar. There are two rapids, one, about four miles up, with a fall of about six feet, and another near the head falling about fifteen feet. At both of these there are exposures of a rusty, somewhat gneissic biotite schist, striking about north-east. Kewagama river.

Kewagama lake, which is much the largest of the different bodies of water examined during the summer, consists of two main parts, an eastern and a western, separated by a long point. The latter runs nearly south almost the whole length of the lake, leaving merely a narrows to join the two parts. The western part is again divided by a second narrows about half way up. The longer axis of the lake would be a line running east and west at its southern end and passing through the first narrows. This would be about eleven miles in length. The extreme width north and south would be about eight miles and a half for the eastern section and nine for the western. The width of the eastern is about six miles at the north end, narrowing to about one mile, half way down and then gradually widening at the Kewagama lake.

southern end to about six miles from the first narrows to the eastern shore.

Diorite, schists and syenite.

Following the shore-line from the outlet round the point dividing the two portions of the lake, a distance of four miles, we met with a coarse-grained diorite, chloritic and biotite schist, and a reddish syenite. A little further on, a soft chloritic schist is exposed, and, about two miles below this, there is a very quartzose altered granite intersected by numerous veins of white translucent quartz of various sizes. Of this quartz several specimens were broken off at random from the top. One of these carrying considerable iron pyrites was assayed under Dr. Hoffmann's direction and gave 0·117 of an ounce of gold to the ton of 2,000 lbs. Others, quite close carried molybdenite and bismuthite. The occurrence of bismuthite is very interesting, as it has previously been found, I believe, in only four localities in Canada.

Economic minerals.

Granite.

Granite is the prevailing rock till the first narrows is reached. There diorite is exposed, and this continues round the point to the second narrows, leading into the northern half of the western section of the lake, and for one mile and a half further. In places, associated with this, is a hard, compact rock carrying considerable pyrites. Quartzose granite is then exposed for some distance, and, about three miles from the head, hornblendic schist. A very marshy creek entering the northern end of this part of the lake, was ascended for about two miles to a small lake at the same level as Kewagama, but no exposures were found.

Returning to Kewagama lake and working along the western shore of this section, mica diorite was seen three miles down, and a quarter of a mile further, chloritic schist. From here to the south end of the lake the rocks are biotite, chloritic and hornblendic schists, with the exception of one point a mile below the narrows, where there is quartzose granite. At the south-eastern corner of this portion of the lake, a river one hundred to one hundred and twenty feet in width enters from the south-west. We ascended this stream for about six miles, passing a little rapid about two miles and a half up, where chloritic schist is exposed. Quite a number of white pine of fair size are seen about two miles up this stream. This brought us to Lake Kai-kaik, which is about four miles long and a quarter of a mile wide. The rocks on this lake are chloritic schists striking east and west, with some slates.

Lake Kai-kaik.

Returning once more to Kewagama we continued the examination of the southern shore, and in a quarter of a mile came to diorite. In the next mile there are several exposures of schist and then one of

diorite, then a mile and a half of schist. Beyond the narrows a porphyritic rock occurs, and from here, along the rest of the southern shore, which is very rocky, schist prevails. Along the eastern shore diorites and granites are the only rocks seen, but along the northern, hornblendic schist, granite, altered diabase and, just at the outlet, biotite schist occur. At the north-east corner of the lake, a small brook, about a mile and a half long forms the outlet of a marshy lake called Kapitagama, which is nearly round and about a mile and a half across each way. This lake was also examined, but no exposures were found.

Kewagama lake well timbered.

Kewagama lake is well timbered, fine white spruce and white poplar being very abundant, with a considerable quantity of balsam poplar and white birch. On some of the islands there is a fair quantity of red pine of medium size, and more particularly near the southern portion of the lake an occasional white pine is seen. At some of the narrows and near the mouths of some of the brooks entering the lake there is a considerable growth of small ash, and along the whole lake shore small cedar is seen close to the water.

On completing the examination of Kewagama we returned to Abitibi, as we were out of supplies and time would not permit us to prosecute the work any further to the eastward this season. A route exists from a long bay on the east shore of Kewagama via Lake Newagama over the height of land into a large body of water known as Seal lake.

Lower part of Kinojevis river.

Abitibi was reached September 14, and a day was spent in packing up part of our outfit which was to be taken to Quinze lake by the Hudson's Bay Company. We were further delayed by very bad weather till the morning of the 19th, when we started back to the forks of the Kinojevis, from which point it was intended to extend the work down to the Ottawa river. Proceeding down the river from the forks for thirteen miles, we came to a small lake, after passing two rapids, one being half a mile below the forks and falling about fifteen feet, while the other is about eight miles down and falls three feet. In this interval the general direction of the river is southerly, but it is very crooked.

Numerous exposures occur of chloritic schist, altered diabase, greenstone and a breccia containing flinty, felspathic quartzite pebbles. A number of these rocks carry considerable pyrite and some have very rusty surfaces. A brook enters the little lake from another lake some three miles in length, situated about a quarter of a mile to the west. On both of these lakes, the prevailing rock is greywacke with a nearly

Small lake expansions.

east-and-west strike, and the same rock occurs all along the river with about the same strike for the next seven miles, for four of which the river is flowing east and for three south-west, at the end expanding into another small lake a mile and a half long with a deep bay extending a mile to the south-west; and on this lake the same rock occurs on the upper portion and in the bay. On the lower part of the lake hornblende schist is exposed at intervals for about a mile. The river now runs in two branches for a mile and a quarter round an island, from three-quarters to one mile in breadth, the foot of this island being at the northern end of Lake Kinojevis. We came down the western branch to the lake and saw two exposures of greywacke still striking nearly east and west.

Kinojevis lake.

Kinojevis lake lies for about five miles a little east of south from its head when it makes a sudden turn to the south-west for about thirteen miles, the part below the turn being known as Crooked lake. At the turn the Kinojevis river, its outlet, leaves it and flowing in a general south-easterly direction for about sixteen miles joins the Ottawa river about twenty-one miles above Lake Expanse. Lake Kinojevis with Crooked lake is very narrow, averaging from a quarter to half a mile in width. At its head, on the western shore, a hard biotite schist occurs and on the opposite shore an altered diorite. One mile down, a bay runs for about a mile in a westerly direction and at its head a small creek enters. This we ascended for half a mile, when we came to a lake which is about two miles and a half long and of increasing width till, at the head, it is about a mile and a quarter across.

On this lake we found hard biotite schists, altered diorite, and greywacke. At the western end a brook comes in and going up this a little over two miles, passing an exposure of greywacke on the way, we

Lake Kekeko.

came to Lake Kekeko. The latter is about six miles long, lies nearly east-and-west, and has two bays at the western end, one running to the north and the other to the south, giving the lake the general appearance of the letter T. Both this and the first lake are practically on the same level as Lake Kinojevis. The first exposure seen on Lake Kekeko is a dark coloured diorite two miles from the outlet and from the point to where the two bays turn off, the rock is entirely slate striking nearly east and west. At the entrance to the northern bay there is diorite and higher up the bay on the east shore, chloritic schist. On the west shore greywacke and slate are the prevailing rocks. At the north end of the north bay a brook enters the lake and we went up it about five miles passing two chutes, one falling ten feet and the other fifteen feet, about one-eighth of a mile apart, and about

three miles from the mouth. Greywacke, greenstone and chloritic schists are the rocks on this creek. At the south end of the south bay, a small creek comes in from two lakes but the brook was quite impassable for the canoe owing to the abnormally low water. I walked up to the first lake but saw only greywacke. However, it was difficult to do any geological work here as it had been snowing for two days and the rocks were hidden.

Crooked lake.

Returning to Lake Kinojevis we proceeded along the lake and at two miles down found altered diorite, and one mile and a half further rusty biotite schist, and associated with it altered granite. Three-quarters of a mile further we found a hard, black, biotite schist and turning down into Crooked lake the same rusty schist. This rock continues down the lake shore but becomes more gneissic and three miles down is more of a schistose biotite gneiss, striking nearly east-and-west. For the next four miles the same rock occurs, very rusty and decomposed in places, and associated with it is a quartzose granite containing quartz and pegmatite veins. Eight miles down Crooked lake, opposite the mouth of a small stream known as the Kamshigamau river, the same gneiss occurs, in places very micaceous and associated with it everywhere is the same granite, intersected by numerous pegmatite veins carrying considerable muscovite, though from surface showings, only in small crystals.

Descend Kinojevis to Ottawa river.

We now returned up the lake to the outlet at the bend and proceeded down the Kinojevis river. There are two small rapids between Crooked lake and the Ottawa with a fall of a few inches. Schistose biotite gneiss, similar to that seen on Crooked lake, was noted on coming down the river at intervals for about eight miles, after which there are no exposures till about four miles from the mouth, when gray granite, also similar to that on Crooked lake, outcrops. All exposures from this point to the Ottawa river are of granite. The Kinojevis river from Crooked lake down, has an average width of about five chains and the Ottawa river where the latter enters it is about seven chains wide.

Having reached the Ottawa our work for the season was finished and we started at once for Klock's depot on Quinze lake. This was reached on the night of October 14, and Mr. Wilson arriving the next day, we left on the following morning and reached Ottawa on the 20th. During the whole season Mr. H. F. Lambart, of Ottawa, acted as assistant and performed the duties allotted to him very satisfactorily.

Geological conclusions.

The general inference drawn from the rocks in the area examined this season is that the line of contact between the Laurentian and Huronian observed by the late Mr. Walter McOuat in 1872 as crossing

Lake Opasatika on the main Quinze-Abitibi route runs in a general way a little south of east, crossing Crooked lake about the mouth of the Kamshigamau river and thence in about the same direction to the Kinojevis river which it crosses about four miles from its mouth. East

Huronian. of this we had no opportunity of observing it. The most northernly rocks met with were Huronian and the northern limits of the Huronian are extended to cover the whole area examined, the granites mentioned as occurring at different localities being considered as intrusive. The whole area has been subject to glacial action and the rocks are nearly everywhere striated, the grooving being very clearly marked in most places.

Timber. With regard to the timber—white spruce, aspen, balsam poplar, balsam, white birch, tamarack, Banksian pine, and cedar are the principal trees found. Spruce and aspen are by far the most plentiful and particularly on the northern portions on both sides of the height of land, excellent spruce for pulpwood is seen on the lake and river shores. Balsam-poplar, balsam fir and white birch are probably the next most plentiful, and tamarack is not far behind, but it is nearly all dead, particularly in the northern portion. Cedar is found scattered along the banks of some of the rivers and around the shores of nearly all the lakes. Small ash grows near the mouths of a good many brooks. Small elms are found in a few places and red and white pine occur from Lake Kewagama south, but not in sufficient numbers or of large enough size to be of importance.

Soil. The soil over the greater portion of the area is a clay loam, changing in places to a somewhat sandy loam, and in some localities would probably make fair farming land if not too wet and cold. Along the river banks it is generally good, and, along the Kewagama river, very good. With reference to this, the conditions at Abitibi post may prove of interest. I was informed by Mr. Skene, the gentleman in charge, that this year the last spring frost at the post was recorded on May 25, and then only one degree. The highest temperature was on July 15, 92° Fahr. and up to September 16 there had been no frost. On June 8 there was a fall of snow, with the thermometer at 36° and in the interval between May 25 and September 16, rain fell on fifteen days.

Vegetables grown. Mr. Skene has a small garden at the post and has met with complete success in growing the following vegetables, viz., potatoes, onions, cabbages, cauliflowers, beans, radishes, lettuces and cucumbers. They sowed timothy seed in the Company's clearing on May 21, 1900, which yielded an excellent crop of hay the following summer. Oats also gave a good crop.

At the Post the land is well cleared. We did not find the weather in the bush quite so favourable as it was there. Water left in the kettle over night was coated with ice on the morning of September 12. The weather broke this year on September 15, and from that date until we completed our work, on October 15, there were very few days without snow or rain. On Kekeko lake on October 4 and 5, we had a two days snow storm, the snow, twenty-four hours after it had ceased falling, having a depth of three inches. From June 15 till September 14 we found the weather delightful.

Game.

With regard to fish and game, I might say that all the lakes near the height of land on both sides were plentifully stocked with pike, pickerel and suckers. In Makamik lake, however, we found only suckers, while in Whitefish river we caught whitefish, in addition to those mentioned. Farther south black bass can be caught in Crooked lake, and possibly a little above it, but they are very scarce.

Of the larger game, moose are undoubtedly the most plentiful. We saw their tracks often quite fresh all over the area examined, and, although not looking for them during the summer, we saw four of these animals, one on the Carcajou river, two on the outlet of Lake Kai kaik, and one on Lake Kekeko. We also heard them frequently during the calling season, and the Indians seemed able to go out and get a moose whenever they felt inclined. Caribou are not scarce, but we saw only one, and that had just been shot by an Indian. I saw a black bear on one of the small lakes off Kewagama, and a large lynx on the Nawapitechin river. Of the fur-bearing animals, beaver, otter, marten, muskrat, mink and fisher are common, and of these we saw many individuals. Ermine are rather scarce, but some skins are brought to the post. Rabbits were found to be comparatively abundant. Both the ruffled grouse and spruce partridge are very plentiful, but ducks are rather scarce.

The Sudbury District.

Dr. A. E. Barlow.

Microscopic examination of rocks.

The first part of the year before the commencement of field operations was spent by Dr. A. E. Barlow in a detailed petrographical examination of the various rock types exhibited in the suite of specimens collected to illustrate Mr. R. G. McConnell's work in the Yukon Territory during the seasons of 1898-1899 and 1900. Thin sections were also examined under the microscope of some of the rocks associated

with the iron deposits along the Kingston and Pembroke railway. The detailed description of these forms an appendix to Mr. E. D. Ingall's report which has just been issued. Many of the different rock species met with by Dr. Robert Bell and Mr. J. M. Bell in the Great Slave lake and Great Bear lake regions were also sectioned and studied, the results in detail being included in the report covering this work. A considerable amount of petrographic work was also done on the rocks from the Atlin district, the results being handed to Mr. J. C. Gwillim to be included in the final report on this area.

Resumption of work in Sudbury district.

This laboratory work being finished early in June, it was decided to send Dr. Barlow to make any corrections and additions found necessary on the map of the Sudbury mining district issued in 1891. The renewed activity in the mining of nickel in the Sudbury district indicated clearly that the present was a most opportune time to obtain a better knowledge of the nature and extent of those deposits. It was recognized that the geological map needed revision and correction, although its general accuracy and usefulness had never been questioned. Besides, the region had become more accessible by reason of occasional clearances, the opening of roads, and the development and extension of the various mines. Much additional information had likewise been secured concerning these occurrences of nickel, while the advance in geological knowledge due chiefly to the introduction of improved methods for petrographic and geologic research showed how desirable it was to undertake a more thorough study of the geology and petrography of this region. In carrying out this work, Dr. Barlow was materially aided by Dr. Ludwig Mond, of London, England, under an agreement by which the former was partially relieved from the Survey during the six months from July 1, 1901, to January 1, 1902.

Denison township.

Dr. Barlow was chosen to take charge, not only on account of his former connection with the work, but also because petrography would of necessity enter very largely into any detailed examination and study of these old crystalline rocks. The township of Denison was selected as the starting point, because the work done here in 1890 was more in the nature of a reconnaissance than a finished survey. With a headquarters camp on the west side of Ethel lake, the whole township was carefully and systematically explored, so that the lines of demarcation between the various rocks, as now ascertained and mapped, are very nearly accurate. A month was found necessary to complete the work in this township, after which a move was made to McCharles lake, to the east in the township of Graham. From this base of operations the work was gradually extended over the town-

ship of Graham and the southern part of Creighton. The southern limits of the nickel-bearing eruptive was also determined in the township of Snider, and the season was brought to a close in September by certain corrections of a minor nature in the geology of the township of Garson.

Nickel-bearing eruptive.

The investigations of the past summer have shown conclusively that the unaltered normal or type-rock with which the deposits of nickeliferous pyrrhotite and chalcopyrite are associated possesses rather exceptional character and interest. It belongs to the general family of gabbros, but has nearly always traces of a broad ophitic or diabasic structure, which, although rude at times, is generally quite distinct. The abundance and occasional preponderance of hypersthene or enstatite justifies its classification and description as a norite, while the presence of a considerable quantity of original quartz makes it a rather exceptional rock type.

Mineralogical composition.

In general, the rock is made up of plagioclase (labradorite or bytownite), hypersthene or enstatite, augite, biotite, hornblende and quartz, with much smaller quantities of apatite, titaniferous magnetite, pyrrhotite, chalcopyrite and pyrite as accessory constituents. In general all the workable deposits of nickeliferous pyrrhotite or chalcopyrite, are situated at or near the borders of bands of this quartz-hypersthene-gabbro or norite.

Genesis of ore.

It is now confidently believed that these several sulphides which the rock contains were introduced simultaneously and as integral portions of the norite magma. At the same time pneumatolytic or secondary action was taking place on an extended scale and much of the sulphide material has undergone a subsequent rearrangement and consequent local enrichment. It must be understood, however, that the secondary action was proceeding during the slow cooling and differentiation of these immense bodies of norite magma, and that the ore-bodies were acquiring their present position and dimensions during this extremely slow diminution in temperature of the whole mass, so that the final consolidation saw these ore-bodies under very much the same conditions as at present obtain.

Brecciated ore.

The brecciated character of many of the ore deposits seems to give emphasis to the fact that autoclastic action has played an important part in the formation of many of these deposits, the sulphides being possibly more susceptible to rearrangement, while the accompanying rocky portions have undergone extensive fracturing and dislocation. Associated with the nickel-bearing norite and passing by insensible gradations into it, is a rock which has been called 'micro-pegmatite.' This rock, which is closely allied to the granites, must be considered as an integral and differentiated portion of the nickel-bearing eruptive. There is an undoubted and perfect transition from one

Nature of transition to norite.

rock type to the other. This transition is now well understood. Microscopically, this change consists in the gradual assumption of a reddish colour replacing the green or greenish gray of the rock, this being accompanied by a corresponding increase in the amount of quartz and felspar. The hornblende of the norite is gradually replaced by biotite as the prevailing ferro-magnesian constituent, while orthoclase succeeds plagioclase as the prominent felspathic mineral. Concomitant with this, a decided foliation may be noticed to have been induced, corresponding with the general strike of the band, while micropegmatite or granophyre is very characteristic over large and often widely separated areas.

Three belts of norite.

In the Sudbury mining district there are three main belts of these norite and associated micropegmatites. These may be called, respectively, the northern, southern and middle belts. At present they are mapped as distinct and separate, but genetically and mineralogically, they are essentially identical. They likewise belong to the same geological period and are very nearly, if not quite, synchronous. The most northern band starts from the old Ross mine (W.R. 5) near the line between lots 5 and 6 on the line between concession III and IV of the township of Foy, and extends in an east-south-east direction into the township of Bowell, where, on lot 6, concession II, it branches. One band runs south-west into the townships of Lumsden and Morgan, where its limits have not been ascertained. The other or main band runs on to the east, cutting across the township of Wisner, and crosses the Vermilion river immediately north of Bronson lake. Trending still more to the north it connects with the large area of basic rocks to the west of Lake Wahnapitae. The delineation of this belt is mainly owing to prospectors.

Middle band of norite.

The middle band of norite, according to the present state of our knowledge, starts on lot 12, concession III of Trill; extends north and north-east through this township into Cascaden, and crossing under Windy lake, goes on uninterruptedly through the north-west corner of Dowling, to lot 2, concession IV, Levack. There is probably then a considerable break between this and the Ross mine on the northern nickel range on the one hand and the basic band which runs through part of Morgan, but both bands are almost identical in mineralogical composition and are certainly genetic equivalents. It is along the northern contact of this band and the granitite-gneiss to the north that the famous Levack deposits are situated. This band of norite is about eighteen miles long and in places nearly half a mile in width.

Main or southern band.

The most important and famous band of norite, however, is the southern belt, which, starting in more or less isolated patches and areas

in the township of Drury, coalesces into one large band in the eastern part of this township. It then extends in unbroken continuity in a north-easterly direction as far as lot 3, con. III of Garson, a distance of over thirty-two miles. The basic or norite portions of this band would average nearly two miles in width throughout its length. In the township of Denison the basic rocks extend over the greater part of the third, fourth, fifth and sixth concessions. About lot 2 the band attains its maximum width of nearly four miles, but a short distance east it is divided up into two belts by the intrusion of a mass of coarse "augen" granitite-gneiss. The northerly, which is the more important of these two belts, has a course of N.N.E. through the north-eastern part of the township of Denison and the south-eastern corner of the township of Fairbank. Thence it extends across the Vermilion river, covering part of the township of Graham and portions of the township of Creighton. From thence it runs across the central part of Snider, through the north-western corner of McKim and the south-eastern part of Blezard and, with the exception of lots 1 and 2, extends continuously across concession III of Garson. Through Creighton and Graham, this belt is over two miles in width, while near the old Dominion mine it is almost three miles from north to south across the norite. The southern branch of this great belt runs across the Vermilion river, covering parts of Graham, and thence on through Waters past Copper Cliff, where it rejoins the other branch. The lenticular mass of granitite-gneiss which divides this southern belt into two portions, thus occupies a strip of country one and a half to two miles wide through Graham and Snider, terminating at or near the Copper Cliff mines. It is newer than the norite, piercing and altering the basic rock. Two branches.

It is now confidently believed that the nickel and copper deposits of Sudbury are the most important of their kind known in the world. The inauguration of the extensive and well equipped works of the Mond Nickel Company at the Victoria mines, and the extension of the works of the Canadian Copper Company, will rapidly place Sudbury in the foreground of the nickel-producing areas of the world. Value of deposits.

Haliburton and Bancroft Areas, Ontario.

Professor Frank D. Adams.

The field-work in the Haliburton and Bancroft areas was very nearly completed during the summer of 1900. The time which could be devoted to the work during the past summer, namely two months and Field-work by Dr. Adams.

a half, was accordingly spent in finishing the field operations and in beginning the preparation of the report.

Townships covered.

Six weeks were spent in July and August in the examination of the specimens collected during the several summers past and in the preparation of the geological maps of the area, and on August 21, I left Montreal for the field, where I remained until September 24. The field work during the past summer was carried on chiefly in the town-

Work by L. N. Richard.

ships of Monmouth, Glamorgan, Harvey, Burleigh and Dysart. The geological relations in the two former townships are very complex, but were worked out successfully with the aid of the topographical surveys made in this area by Mr. L. N. Richard of the Geological Survey, who

Distribution of rocks.

accompanied me during a portion of September. The distribution of the nepheline syenite, which occurs abundantly in these townships and which, in the eastern portion of the area embraced by the Haliburton sheet, holds the large deposits of corundum discovered by the Survey and now so extensively worked, was carefully traced out and several new areas of this rock, often containing indications of corundum, were discovered and mapped. The great gabbro area in the southern portions of these townships, which holds the iron ores occurring there, was also surveyed and carefully studied. Great bodies of excellent limestone were also found in the south-western portion of Glamorgan.

Dysart.

After the completion of this portion of the work, the eastern half of the township of Dysart was examined, in order to determine the limit of the limestones against the granite-gneiss and the character of

Burleigh and Harvey.

their contact. This work having been completed, the southern portions of the township of Burleigh and Harvey and a portion of western Cavendish were surveyed. The mapping of the entire area was thus finished. With the completion of this work it may be appropriate to state very briefly what has been accomplished.

Area covered by geological survey.

A large area in eastern Ontario, comprising about 4,200 square miles, about the geology and mineral resources of which, at the time the work was commenced, practically nothing was known, has been surveyed topographically and geologically, and a great mass of information concerning its character and resources has been collected. Two

Haliburton map-sheet.

maps have been prepared. The first of these, known as map-sheet number 118 of the Ontario series, (Haliburton sheet) is on a scale of four miles to an inch, and comprises an area of 3,456 square miles, its four corners being situated respectively in the townships of Finlayson, Hagarty, Grimsthorpe and Digby and having as its chief centres of population the villages of Haliburton, Bancroft, Coe Hill, Whitney and Barry's Bay. The Ottawa, Arnprior and Parry Sound railway runs across the northern portion of the sheet, while the Victoria

branch of the Grand Trunk railway, the Irondale, Bancroft and Ottawa railway and the Central Ontario railway have their termini in the southern portion of the area.

Bancroft sheet.

The second map is a special one and is to be known as the Bancroft sheet. It comprises an area of 2,040 square miles and has been drawn on a scale of two miles to an inch. It embraces the south-eastern portion of sheet 188, reproducing it on a larger scale and it also includes the country to the south, as far as Stoney lake, representing an additional area of 680 square miles. The necessity for this second sheet arose from the impossibility of showing the geological structure of so complicated an area on so small a scale as that of sheet 188. It was also found that a study of the district to the south of the Haliburton district was necessary in order to interpret the structure of the northern area. The Bancroft sheet will represent the first large Laurentian area in Ontario which has been mapped in such detail and will show excellently the character of a typical area of the rocks of the upper division of this system. Both maps will be coloured so as to represent the areas and distribution of the several petrographical units which comprise the districts which they represent, without any attempt to modify the mapping by introducing considerations of relative age.

Granite gneiss.

The survey has shown that the northern half of the area mapped consists almost exclusively of granite-gneisses of igneous origin which would in all probability have been classed by Logan as Fundamental gneiss. The southern half of the area on the other hand, consists chiefly of a series of very ancient sedimentary rocks, largely limestones, which rests upon the gneissic series, but which has been invaded and altered by it. Large areas of the sedimentary series have been so shattered and penetrated by the granite-gneiss that a sort of breccia on an enormous scale has resulted. Great bathylites of the granitic rock arch up and break through the sedimentary series elsewhere, the latter being wrapped around the bathylites in great sweeping curves.

Bathylitic structure.

The same bathylite structure is observable in the northern gneisses also, and can be traced by the curving strikes of the foliation of the gneiss, but here the limestones have been swept away by erosion.

Autoclastic rocks.

In the south-eastern portion of the area the limestones are found in a comparatively unaltered condition and are associated with great volumes of amphibolite and other foliated rocks, as well as with occasional bands of conglomerates—some of which, at least, have been shown by Dr. Barlow to be of autoclastic origin. The amphibolites are in part altered volcanic tufas. A great volume of nepheline syenite has been

shown by the survey to occur, associated with the limestones in the southern portion of the area. This remarkable rock has apparently some genetic connection with the limestones and also with the granites. Great intrusions of gabbro have also been found associated with the amphibolites in several parts of the district, and quite apart from these latter rocks marked evidences of volcanic action have been observed in several parts of the Bancroft sheet.

Economic mineral.

The area embraced by the survey is one which contains many mineral deposits of economic value—iron ores, mica, corundum, apatite, mineral paint, etc. These have, in all cases, been examined and their description will constitute an important chapter in the report now in course of preparation, which will form a compendium of all that is known of the mineral resources of the area in question.

Botany and Zoology.

Professor John Macoun.

Since my last report of progress was completed I have continued to conduct the correspondence and to perform the usual routine work of this Branch. When an opportunity offered last winter I worked on Part VII of the Catalogue of Canadian Plants and was able to finish it before spring. This part includes the Hepaticæ (Liverworts), Lichenes (Lichens) and an addendum to Part VI—the Musci. It is unnecessary to refer in detail to the enormous amount of work involved in the above and in the examination and labelling of a large number of specimens.

Catalogue of plants.

The following table will, however, give some idea of the latter:—

Liverworts	1,874
Lichens	3,892
Mosses	11,025
Total	16,791

These 16,791 specimens are now in the cases in the herbarium and are arranged in such a way that any one taking Parts VI and VII of the catalogue can see the various species and forms mentioned in the text. This work is now in the hands of the King's Printer, and the first part—the Liverworts—has been printed.

Flora of S. W. Ontario.

For many years I had desired to investigate the flora of south-western Ontario and it was understood before the death of Dr. G.

M. Dawson that I should take up that work during the summer of 1901. It seemed advisable, from a scientific standpoint, to examine the flora and fauna of the Grand river and see how they compared with those of the south shore of Lake Erie. Both the late Dr. Dawson and yourself considered it better to take a broader field and to look more at the economic side of the question and make some sort of report on the fruit-producing capabilities of the region traversed. With the above object in view, I left Ottawa on May 8 and returned on September 7, after spending four months in the field.

Owing to the work I have had to carry on in many distant fields and the multiplication of duties, a proper examination of the flora of the interlake peninsula of Ontario had never been made. Sir William Hooker, in a letter to the writer in 1861, urged him to make a personal examination of the shore of Lake Erie and stated that less was known of the flora bordering on the great lakes than of that within the Arctic circle.

As the natural flora of a country is an index of its capabilities and climatic conditions, so an examination and enumeration of the various species of plants growing in a given region, will, when properly understood, solve the problem of the success or failure of any branch of agriculture in that region. Owing to this knowledge, the writer was enabled in 1872 and in later years, in the face of continuous opposition, to publish to the world the suitability of Manitoba and the prairie region generally for the growing of cereals. It was only from a knowledge of its plants that he could do this, and as nature never errs, his prophecies have been entirely fulfilled.

Fruit-growing.

Of late years fruit-growing has been a paying branch of agriculture, and the Niagara peninsula and Essex county have been the advertised counties for its production. It was thought that an examination of the country would show that these areas could be greatly enlarged and that fruit culture could be made profitable over the entire district. Acting on this thought, the country between the Niagara river and Owen Sound was thoroughly examined during the past summer and over 1,400 species of plants collected. In no instance was anything found to indicate a lack of warmth and everything favoured the assertion that the whole region was suitable for the cultivation of fruit, ranging from small fruits to cherries, plums, apples, pears, peaches and grapes. There can be no question regarding this matter, as wherever the growing of fruit has been attempted it has been a success if properly undertaken. The purpose of this report is not to speak of fruit-growing in any special section of the region, but to refer particularly to the natural fruit and its bearing on the products of the soil generally.

Niagara.

On May 8 work was commenced at Niagara Falls and a note made of the plants found growing within a radius of eleven miles of that point. Special attention was given to the old forest growth, which largely consisted of hickory and oak, though no less than thirty species of trees were enumerated. Later it was found that the same forest trees, with variations on account of soil, extended to Windsor. These trees differ very much from those met with on Lake Huron and east of Toronto and it may be safely said that this difference in the forest growth must result from a milder climate in winter in the south-western part of the province. Peaches are the most tender fruit grown in Canada and at present heavy crops are raised between Hamilton and Queenston, and indeed wherever attempts have been made in the Niagara peninsula. A similar fruit centre is the district around Leamington and Kingsville in the county of Essex. This district has the same forest growth that is found at Niagara and the climate is practically the same. It is perhaps needless to say that fruit culture with profit can be carried on in every part of the country between these two points.

Leamington and vicinity.

Although the peach has been just selected as an example, it was not meant to exclude other fruits. Cherries, plums, pears, apples, grapes and small fruits succeed equally well. The capacity of the country under discussion for growing crops has hitherto been little understood, as tobacco culture is only now becoming a remunerative business. Only a few years ago it was scarcely thought of as a paying crop, yet in 1900 one firm paid out over $250,000 for that raised in the neighbourhood of Leamington. A very large tobacco warehouse was being erected at Leamington last summer by another firm and it was currently reported when I was there in August that 5,000 acres of tobacco were under cultivation for it.

Tobacco.

Collections of plants were made at many points, and in every locality visited the growth was noted, and the conviction forced itself upon me that the capacity of the whole region was only limited by the amount of intelligence brought to bear upon its natural capabilities.

Lake Huron.

Less time was spent on Lake Huron than Lake Erie, but the counties bordering on the former and on Lake St. Clair are known for their grain and general fertility and locally for their fruit. The time will come when the export of apples from this large area will be second to that of no other part of Ontario. The soil in most places is of the right kind, being largely mixed with lime, and the climate being cooler than that on Lake Erie, the fruit will be later in ripening and hence will keep better.

Apple raising.

Apple-raising in the past in many districts has been a hap-hazard business. Each farmer put out an orchard, generally leaving the agent to select his stock, took more or less care of it, and waited for returns. Returns came in the shape of fall or late summer apples but scarcely any winter varieties, and hence no return in a monetary sense for the time and labour spent. This has been the case in parts of Essex county, where fine orchards have been cut down because they yielded only unsaleable fruit. Orchards planted with winter varieties in any of the counties north of the Thames must of necessity be expected to produce good fruit, and I look to this region for the future winter supply of Manitoba and the North-west until the prairie provinces produce their own fruit.

During two weeks in May large collections of botanical specimens were made in the vicinity of Niagara Falls, and on the 23rd of that month I took the train for Leamington, in Essex county. Though having my headquarters there, I made trips to Ridgetown, Kingsville, Arner, Amherstburg, Sandwich and Windsor. In all these places I secured large collections and added numerous species to our known southern flora. From a cursory inspection very little can be learned except in a general way, so I made a thorough examination of the district, and am satisfied that Lake Erie and the Detroit river and even Lake St. Clair, by no means form natural limits to the flora, either of Ontario or the States to the south. This deduction is based on the natural floras of the whole districts and from their identity. It is probable that the Canadian side is warmer in the autumn, owing to the heat from the water being blown in upon the land at that season.

Southsrn trees.

Three trees which range as far south as Texas come to perfection both at Niagara and Leamington, and very likely in the intervening country. These are the custard apple *(Asimna tritboba)*, the sassafras *(Sassafras officinale)* and the red mulberry *(Morus rubra)*. These trees, coming to perfection in the district, show that its climate is much milder in winter than would be expected from its latitude. The herbaceous plants are even more southern in their facies, and indicate a warm summer climate. This is more apparent in Essex county than it is in the vicinity of Niagara Falls.

Valley of the Thames.

Chatham and the valley of the Thames was visited and numerous rare and interesting plants were seen in perfection, and the astonishing growth of weeds and native plants gave proof of the richness of the soil. Here was found an assemblage of plants that it was hardly expected could find a home so far north. These were cup plant *(Silphium perfoliatum)*, prairie dock (*Silphium terebinthainacecum*) and *Actinomeris squarrosa*, all of which grew in great luxuriance along the Thames.

Many other rare and beautiful plants were seen, but none equalled the rose mallow *(Hibiscus moscheutos)* and the tall orange lily *(Lilium superbum)*, which were far from rare on the line of railway towards Windsor.

Windsor and vicinity.

A visit had been made to Amherstburg, Windsor and Sandwich in June and many things noted as worthy of record. On this account the last ten days in July were spent at Sandwich and a large collection of plants made, which had many points in common with prairie species. Indeed, many species found in the woods were more at home in grassy glades which seem to have been their natural habitat. Of these species were *Liatris spicata*, *L. scariosa*, *Ludwigia alternifolia*, *L. polycarpa*, *Vernonia Macounii*, a new species, *Lycopus lucidus*, and many others. The woods were full of species that had seemingly only crossed the border, though some of these were found at Leamington also. The flora of Essex county requires careful examination, and many species will yet be found that have not hitherto been recorded as Canadian. These are rare, of course, and are of more interest to the botanist than the general public.

Pelee point.

The flora of Pelee point and Pelee island is of this character, but in the little time at my disposal, exhaustive work could not be done. On Pelee point, however, fine specimens of the blue ash *(Fraxinus quadrangulata)* and the three-thorned acacia *(Gleditschia triacanthos)* were seen, and the nettle tree *(Celtis occidentalis)* occupied more than half the area on some parts of the point. Pelee island has many interesting species; the more notable trees not found on the north shore were the red bird *(Cercis Canadensis)*, Kentucky coffee tree *(Gymnocladus Canadensis)*, and *Tilia heterophylla*, a southern form of basswood.

Some time was spent at Wallaceburg, near Lake St. Clair, and although the flora was very rich, few species not seen elsewhere were noted. The wheat fields and meadows in this section were covered with heavy crops and large areas were planted with the sugar beet, which, I was told, is one of the staples of the district.

Sarnia and vicinity.

The careful study of the country near Sarnia being necessary, I remained there for ten days in June and about the same time in August. Like Sandwich and Windsor in this district have many peculiar plants, but the most interesting thing noticed was the influx of more northern species, showing that the colder water of Lake Huron had a tendency to lower the general temperature. It would be interesting to know what the difference of the winter and summer temperature is between Windsor and Sarnia. Here the hickories and oaks had largely disappeared and the sugar maple was the principal tree. The

sandy point around Point Edward at the outlet of Lake Huron and the marsh between it and Sarnia, has a flora in many respects peculiar to itself. Being either sand or marsh, its flora partakes of the nature of these, and is not for that reason indicative of climate. Visits were made to Camlachie and Wyoming, where the nature of the forest, away from the sand, could be more easily seen.

Goderich.

A visit to Goderich showed that the Lake Huron forest was almost identical with that of Hastings or Northumberland counties, except that elm, maple and black cherry were larger and better developed on Lake Huron than east of Toronto. Numerous herbaceous plants were seen, but very few were uncommon or of peculiar interest. In the river bed tuberous Indian plantain *(Cacalia tuberosa)* was found, and associated with it another rare species, Great St. John's wort *(Hypericum Ascyron)*. The valley of the river Maitland is deep and quite narrow near its mouth, and on this account has not the flora which is usually found in such places.

Between Goderich and Southampton the forest everywhere proved that the estimate I had formed of it on the lower part of Lake Huron held good. The same terms may be applied to the lower part of the Bruce peninsula and the country between Southampton and Owen Sound. Indeed the whole district, extending almost to Collingwood, may be included in the future apple-growing area of western Ontario

Bruce peninsula.

An examination of the Bruce peninsula showed that from the Fishing islands to Cape Hurd or Tobermory the shore facing Lake Huron was low and almost bare of soil, with shallow water for a long distance from the land. On shore, the land rose gradually and was very rocky and totally unfitted for cultivation. The coast facing the Georgian Bay was said to be quite elevated and the land, at least in part, suited for farming purposes.

From the plants found along the shore I surmise that the ice is piled there in spring and that vegetation is somewhat retarded thereby. Asters and other composites were in great profusion, and some forms were collected that may possibly be new to Ontario. Near Tobermory many new specimens were collected, among them *Solidago Gillmani*, new to Canada, and *Helenium Huronense*, new to science. Owing to the clearness of the water, there was no difficulty in seeing the bottom at twenty-five and even thirty feet. The lake for hours would often be perfectly smooth and while the lead was being cast we could examine the bottom by looking over the side of the boat.

During the last two months of field-work I was assisted by Mr. Percy Marshall and with his help was enabled to make much larger collections than would otherwise have been possible.

With the exception of a few reptiles and batrachians no natural history specimens but plants were collected.

Collections received.

As usual there have been many collections of plants examined at the office besides those brought in by the members of the staff. Three collections from Prince Edward Island, sent by Mr. Lawrence Watson. A very fine collection from Labrador, sent by Dr. Alex. McKay. A large and valuable collection from Anticosti, sent by the Abbé Laflamme, of Laval University, Que. A collection of Ontario plants sent by Mr. W. Scott, head master of the Normal School, Toronto. Collections made at Banff, Rocky Mountains, were sent by Mr. N. B. Sanson, curator of the museum there. Collections were sent from British Columbia, by J. A. Pinco, B.A., head master of the High School, Victoria, by J. R. Anderson, Deputy Minister of Agriculture, Victoria, and by R. H. Jameson, who collected in many parts of the province. Mr. Gwillim, formerly a member of this staff, sent a very nice collection from Nelson, B.C., and another was received from Miss E. Girdwood, of Cottonwood, B.C. Besides these many minor collections were sent to the office and the naming of these, with the correspondence involved, took far more time than the above enumerations would convey to the reader. My own collections this year amounted to over 2,500 sheets of specimens, representing upwards of 1,600 species. The sorting and naming of these and getting them in order was no small undertaking, but this has been done since my return from the field.

I am now engaged in reading the proofs of Part VII of the Catalogue of Plants, and in preparing the MSS. of Part II of the Catalogue of Canadian Birds, which I hope to have nearly completed by next spring.

Future work.

The writing of Part VIII of the Catalogue of Canadian Plants is in contemplation; this will conclude my work on Botany. When written it will include the characeæ, sea-weeds and at least 1,000 specimens of fungi. Before completing this work, however, it will be necessary to have a better knowledge of the sea-weeds of the St. Lawrence river and gulf. Large collections have already been made of the Pacific coast species, and consequently our knowledge of them is much more complete than of those nearer home.

Presentations.

Presentations.—Mr. C. Scrim presented to the museum a section of two trees, *Pinus strobus* and *Quercus rubra*, which had grown together in the form of an X; the specimen is about three feet high and the two trees were fastened together by the bark.

A very fine specimen of *Polyporus fomentarius* was presented by Mr. Leggatt, of the *Evening Journal*.

A specimen of wood showing an extraordinary example of the filling up and repair of tissue was sent to the museum by M. L. W. Shipman, of Almonte, Ontario.

Herbarium work.

My assistant, Mr. J. M. Macoun, did not return from the Paris Exhibition until January, and on that account the number of specimens mounted and distributed during the year was not as large as it would otherwise have been. Since my last summary report was written 4,195 sheets of specimens have been mounted and placed in the herbarium cases. Of these 2,150 were Canadian, 576 from the United States and 579 from Europe and other foreign countries; 910 sheets of Cryptogams were also mounted; 1,660 sheets of specimens were distributed from the herbarium, chiefly in exchange for specimens received. The principal institutions to which specimens were sent are:

New York Botanical Gardens	257
U. S. National Museum	263
Kew Gardens	220
Natal Botanical Gardens	150

We are still very deeply in debt for specimens received from individuals and public institutions, but hope during the coming winter to find time to label and distribute a sufficient number of specimens to more than balance all our accounts.

Several large contributions have been made to our herbarium from foreign countries during the past year. These include collections from Alaska, sent by the N.Y. Botanical Gardens, from the Western United States, sent by the U.S. National Museum, and about 1,100 specimens from the Missouri Botanic Gardens. These last are a part of Dr. Engelmann's private collection.

Work of assistants.

The employment of Miss Stewart as our clerical assistant will enable us to bring the general work of the branch more nearly up to date this winter than it has been before. Since her employment she has been chiefly engaged in filing arrears of letters, writing labels and in completing the numbering of the sheets of botanical specimens in our herbarium. Since January 1, Miss Stewart has for two hours each day assisted the librarian. Several years ago, we adopted the system of placing a running number on every sheet of specimens mounted, and Miss Stewart has just completed the numbering of the Canadian specimens mounted before this system was adopted. Of Canadian flowering plants alone we have now 32,431 mounted sheets.

After his return from Paris, my assistant (Mr. J. M. Macoun) was chiefly occupied until spring with accumulated arrears of office work, which included the determinations of specimens left over from previous years. During May he spent some time in a further study of the violets of the region about Ottawa several new species being added to those already known. Descriptions of these and other new species have been published from time to time in *The Ottawa Naturalist* and elsewhere, and I would respectfully draw your attention to the need of some publication in the form of an annual bulletin, in which we could record the progress made in Natural History work in Canada.

NATURAL HISTORY OF THE INTERNATIONAL BOUNDARY.

Mr. J. M. Macoun having been appointed naturalist to the Canadian International Boundary Commission, joined Mr. J. J. McArthur's party at Chilliwack, B.C., on June 11, and worked in the Chilliwack valley until September 3. He makes the following report:

Boundary Commission.

'As soon as I was notified of my appointment as naturalist to the Boundary Commission, I took steps to secure the services of Mr. William Spreadborough of Bracebridge, Ont., who has been attached to one or other of the Geological Survey parties as field naturalist during every season but one since 1888. Mr. Spreadborough went at once to Chilliwack and had been collecting birds, mammals and plants in that vicinity for about three weeks when I reached there on the afternoon of June 11. My instructions were to join Mr. McArthur as soon as possible. Mr. McArthur happening to visit Chilliwack that evening, I delayed my departure until the next day, when I accompanied him to his camp about twelve miles from the village.

'Having learned from Mr. McArthur that his progress up the Chilliwack river was very slow on account of the difficulty he was experiencing in cutting a trail through the dense forest, I decided that I would remain on the outskirts of the forest until he had reached Chilliwack lake. This arrangement permitted me to make a very thorough study of the flora and fauna of the valley in the immediate vicinity of the Chilliwack river, and of the low hills which bordered it in the vicinity of our camp. At this time, and during the whole season, Mr. Spreadborough was occupied in collecting and preserving the skins of birds and small mammals.

'After remaining two weeks at "Macguire's" where my first camp was established, I moved about ten miles up the river to "Thurston's" where there was a small clearing. After collecting there for a few

days I started for Chilliwack lake on July 5, Mr. McArthur furnishing me with the means of transport. From July 6 until July 31 I worked in the vicinity of Chilliwack lake, ascending most of the mountains which border it. In nearly all of these ascents I was accompanied by Mr. Spreadborough and when necessary we camped for one or more nights near the summit of the mountain we happened to be on. During the period I was on Chilliwack lake I made Mr. McArthur's camp my headquarters, and was furnished by him with supplies and transport whenever I required them.

'Between July 31 and August 19 I worked slowly down the Chilliwack river, ascending mountains to the north and south of the river. Three days were spent on the Cheam range and, with the exception of this trip, my whole work, up to this date was done either on the International Boundary or within a few miles of it. Even when on the Cheam range the boundary was only about ten miles distant.

'On August 20, I went to Sumas lake in order to study the flora of the so-called Sumas "prairie". I remained there three days and made a complete collection of the plants in the vicinity of the lake, while Mr. Spreadborough collected birds, mammals and reptiles.

'Rejoining Mr. McArthur's camp at the mouth of Tami Hy creek, Mr. Spreadborough and I ascended the mountain of the same name on August 28, camping near the summit for three days. This finished my botanical work for the season and I started for Ottawa on September 3, leaving Mr. Spreadborough to collect birds and small mammals. He continued at work until November. The result of the season's work in specimens was 1,972 sheets of botanical specimens, 442 skins of birds and mammals, about 300 reptiles and batrachians, and a few shells and insects. Specimens collected.

'Since my return from the field my time has been in part occupied in studying the specimens collected during the summer. In nearly every large genus of plants new species were discovered and many species hitherto unknown in Canada were collected. It will require the whole winter to work the specimens up properly, and no detailed report on either the plants or animals of the Chilliwack valley can be written until this is done. The specimens collected in British Columbia in previous years are being studied with those collected in 1901, and my complete report, when published, will include the work done by others in earlier years.

'The arrangement by which I was made dependent upon Mr. McArthur for supplies and transport worked satisfactorily in every respect and Mr. McArthur not only was at all times willing to assist

me in my work, but his long experience in mountain surveying and exploration enabled him to make many suggestions to me that greatly increased the results of my work.'

On Borings for Natural Gas, Petroleum and Water; also Notes on the Surface Geology of part of Ontario.

Mr. Robert Chalmers.

Wells and borings.

Your instructions to me in May last regarding field-work for the season were to undertake an investigation of the wells and borings for petroleum, natural gas, brines and potable waters in that part of the province of Ontario extending from the St. Lawrence river westward to Lake Erie and Lake Huron, and also to study the surface geology at all localities which might be visited. Considerable progress has been made in this work, but owing to the extent of the field and the varied character of the investigations, it could not be carried out in sufficient detail in the time allotted to enable me fully to report upon it. This is more particularly the case in regard to the inquiry concerning natural gas and oil, and the water supply of cities and towns. Although it was found difficult to get exact data on these subjects, still a large amount of valuable information has been secured. A great deal of exploratory work in search of gas and petroleum is now going on, the results of which are not yet available. Moreover, some of the smaller gas and oil fields recently exploited seem likely to be extended, and it would be premature at present to make any statements regarding their prospective value. All that can be done in this report, therefore, is to record as briefly as possible the facts which came under my notice, making special mention of matters of economic importance.*

Valuable information secured.

Economic importance.

Brockville.

I left Ottawa on the 21st of May and commenced work at Prescott. Dr. Ells of this Survey joined me at Brockville, and a few days were spent by us between that place and Kingston, endeavouring to ascertain the relation between the marine Pleistocene deposits in the upper part of the St. Lawrence valley and the clays and sands of the Lake Ontario basin. The western limit of the marine beds was found at Brockville and northward along the line of the Canadian Pacific railway to Smith's Falls, while Erie clay, supposed to be of fresh water formation, was noted at Lyn, Gananoque, Kingston and west-

Limit of marine beds.

*See Report on Natural Gas and Petroleum in Ontario prior to 1891. By H. P. H. Brumell, part Q, Annual Report, Geol. Surv. Can., vol. V, 1889-90-91.

ward. Proceeding from Kingston to the natural gas and petroleum fields of the Ontario peninsula, I was engaged almost uninterruptedly in that region till the close of field-work on the 12th of October.

THE OIL FIELDS OF LAMBTON COUNTY.

Lambton county.

The oil wells of Petrolia, Oil Springs and Sarnia naturally demanded the first attention from their importance. In this investigation I was greatly assisted by Mr. James Kerr, of Petrolia, who has made a special study of the oil wells of Ontario since they were first operated. A number of these wells have been yielding oil since 1860-61, and, as might be expected, there has been a greater or less falling off in the quantity produced, a certain proportion of the wells giving out from time to time. A large number of new wells have, however, been put down every year, so that the supply of oil has been kept up nearly to the average.

Yielding oil since 1860.

Thickness of strata.

The usual depth of the oil-bearing formation is from 450 to 475 feet. As the surface deposits are from 100 to 125 feet thick, the rock has to be penetrated only about 350 feet.* Well drilling is, therefore, not a very expensive business, and in some parts of the Petrolia field the ground is literally riddled with wells, which are often not more than 200 to 300 feet apart. At present there are few of these that yield more than a barrel of oil a day, while most of them furnish much less. One operator informed me that he had 120 wells in a certain part of the Petrolia field which gave him about 100 barrels of oil a week. This may perhaps be taken as the average yield. The total number of wells now producing oil in the county of Lambton is approximately estimated at from 10,000 to 11,000. They all terminate in the Corniferous formation. The greater part of the petroleum obtained from the wells of Lambton county is sold to the Imperial Oil Company, whose refinery is at Sarnia.

Average yield.

Test well.

A deep test well was drilled at Petrolia in 1900, terminating some 432 feet in the Trenton. The total depth of the well was 3,777 feet. The Onondaga salt group was struck at 1,275 feet and was found to be 895 feet thick. The water in the well was shut off by a $6\frac{1}{4}$ inch casing. No oil, gas or salt water was found.

Bothwell Oil Field.

Bothwell.

A new local oil field has been opened up near Bothwell in the township of Zone, Kent county, a short distance to the south-west of the former oil field of the Thames valley in the township of Mosa,

* "The Ontario Oil Field" was described by Dr. Robert Bell in a paper read before the Royal Society of Canada in May, 1887.

which was known as the Bothwell field and wrought for some years. This new oil pool lies between the Grand Trunk railway and the Thames river, about two miles and a half west of the village of Bothwell. Mr. J. F. Carman was the discoverer. He and Dr. Fairbanks, Messrs. Brewer and Puddicombe, together with Hiram Walker & Sons are the principal operators. Messrs. Clark and Elliot have oil wells to the east of Bothwell village. The oil is found in a limestone at about 400 feet beneath the surface, or rather from 395 to 410 feet. The beds passed through in drilling consist of (1) 210 to 212 feet of surface materials, (2) a few inches of dark shale, probably Hamilton, and (3) 175 to 200 feet of Corniferous limestone. Each of the operators mentioned has a separate oil area and power-house. The total number of producing wells at the time of my visit was from 200 to 240, but new ones are continually being sunk. The yield of oil is from ten to fifty barrels a month for each well, and a total of 5,000 to 6,000 barrels a month for the whole oil field.

Beds passed through.

Output.

The oil belt is five or six miles long, following the Thames river, and from a half to three-quarters of a mile wide; but a smaller oil pool has lately been opened up to the north of this, on what is supposed to be a separate anticlinal. In this oil field, there are said to be three or more north-east and south-west anticlinal axes—one main axis and several subordinate ones. Another series of anticlinals crosses these at a wide angle. The productive oil wells are found at the intersection of the two sets. The dip is lower on the southern sides of these anticlinals than on the northern, and consequently oil occurs further from the axes on this side.

Anticlinals.

Dutton Oil Field.

Another oil pool has recently been opened up at Dutton, in the township of Dunwich, Elgin county, about three-quarters of a mile from the Lake Erie shore. The wells here, thirty-two in number, yield from 1,000 to 1,100 barrels a month. They are about 435 feet deep, 255 feet of this being surface beds. The rock consists of 165 feet of limestone, probably Corniferous, with sandstone beneath. The oil is said to be in the sandstone.

Dutton.

Tilsonburg Oil Wells.

Wells from which oil was obtained were sunk in Dereham township near Tilsonburg in 1861. Recently several other wells were drilled in the vicinity of this town, but they failed to give oil in quantity. Last year, however, Mr. J. W. Cuthbertson, of Tilsonburg, sank two wells in the valley of Big Otter creek, below the town and has met with success.

Tilsonburg.

The upper well (No. 1) is just above the Grand Trunk railway bridge (Wabash line) on lot 6, concession XII of Dereham in Oxford county. The boring is 268 feet deep and passes through (1) surface beds 81 feet, (2) rock 187 feet, the latter consisting of limestone (Corniferous) and sandstone beneath, as at Dutton. The flow of oil from this well is about 24 barrels a day.

Three new wells.

No. 2 well is about a mile and a half below No. 1, in the valley of Otter creek. In it the beds passed through consist of 74 feet of surface materials, with limestone and sandstone beneath, as in No. 1 well. The oil comes from the sandstone, which is probably of the Oriskany formation. This well (No. 2) yielded at first about seven barrels in the 24 hours, but the flow fell off to about a barrel and a half at the time of my visit.

A new well (No. 3) was being drilled when I was there (October 7), about midway between the two others. A depth of 165 feet had been reached and the limestone at that horizon had a perceptible odour of petroleum.

The facts in regard to these smaller oil pools show that the districts in which they occur were not thoroughly explored in former years, and that not only the Corniferous limestones but the underlying sandstone is oil-bearing.

NATURAL GAS.

Natural gas.

The principal gas fields of Ontario, as is well known, are situated in Essex and Welland counties. The Essex field, first opened up in 1891, has been the most productive. It is, however, of very limited extent, being only about five miles long, following the Lake Erie shore from Kingsville to Leamington, and about one mile wide. To show how this small field has been drawn upon, it may be stated that there was exported from it to Detroit alone between February, 1895, and July, 1901, 9,639,355,600 cubic feet of gas. These are probably minimum figures and besides there was a considerable export to Toledo, not to mention the quantities supplied to the Canadian towns and villages. This heavy drain on the gas storage of such a small area could naturally have but one result, namely, speedy exhaustion, and for the last year or two the supply has declined so rapidly that consumers fear they may very soon be left without any gas at all. In the hope of maintaining the supply, the United Gas Company undertook, during the past summer, to clean out and deepen the existing wells and to sink others to a considerable depth in the gas field in order to test the productiveness or otherwise of the Trenton formation. The salt water

Kingsville.

Exhaustion.

Deep wells.

was pumped out of the wells and it was found that this operation was followed by an increase in the gas pressure, but it was only temporary, for soon after pumping ceased the wells went back to their former condition. In the deep wells no gas was found, though the Trenton seems to have been reached at several points. Since my return from the field, however, I have heard that a new supply has been obtained from a well sunk at Wheatley, but particulars are wanting.

Gas from oil wells.

Several of the oil wells in Sarnia and Plympton townships, Lambton county, yield gas in small quantities, sufficient to heat and light the farm houses in the vicinity and furnish the power necessary to drive the pumps of the oil wells. The gas from these has been used for many years.

Gas in the Thames Valley.

Thames valley.

Natural gas is found in the surface deposits on the south side of the Thames in the townships of Orford and Aldborough, at a depth of 90 feet. A hard-pan occurs here, beneath which there is a bed of sand and gravel. It is in this that the gas is found. The farmers bore for it and pipe it to their houses, using it for heating and lighting purposes.

The Welland Gas Field.

Welland gas field.

This is the largest known gas area of the province, being eight or ten miles long and from two to four miles wide, and has been operated since 1890. The principal portion of the gas is piped to Fort Erie and Buffalo, N.Y. The wells are from 750 to 850 feet deep.

Source of the gas.

In the shallower wells to the west of the Welland canal the gas is said to come from the Clinton, and in the deeper wells to the east and south-east from the Medina, although these formations may not be its original source. Mr. D. A. Coste, manager of the Provincial Gas Co., informs me that very little falling off is noticed in the supply of gas in the Welland field. The company employs men who look carefully after the wells, keeping them clean and pumping out at once any water which may get into them.

Deep wells.

Deep wells have recently been sunk in the Welland field—one on lot 4, concession V, township of Willoughby, (No. 143) to the depth of 3,032 feet. Drilling stopped at what was supposed to be the Calciferous formation. Salt water was struck at 3,030 feet. There was little showing of gas, and this only in the bottom sandrock. The Clinton formation was reached at 473 feet from the surface and the Medina at 594 feet; the base of the Medina at 614 and the summit

of the Trenton at 2,313 feet. From the base of the Medina to the summit of the Trenton the rocks seemed to be all shales.

Another deep well was drilled on lot 9, concession II of Humberstone, seven miles south-west of the last. The granite was struck at 3,300 feet. Neither gas nor oil was found.

The Dunnville Gas Area.

Dunnville gas area.

In Haldimand county, four or five miles north-east of the town of Dunnville, gas has been found in paying quantity. The gas wells are situated in Moulton township, near Diltz station on the Michigan Central railway. One of these, when sunk a few years ago, yielded 1,000,000 cubic feet a day. Other wells producing gas in less quantities have been drilled in this area. The town of Dunnville is supplied with gas from wells in this vicinity. Drilling was going on at the time of my visit, and it is supposed the gas field extends further to the north-east towards the county line. The depth of the wells and the thickness of the formations yielding the gas are the same as in the Welland field west of the canal. The surface deposits are about 100 feet thick. About twenty-one wells have already been drilled. Salt water is reached at 300 to 400 feet.

Gas in Pelee Island.

Gas in Pelee island.

Gas and petroleum were found many years ago on Pelee island, in the geological horizon at which they occur in Essex county, but in quite limited quantities. Since that time, further development work has been attempted but without satisfactory results. The wells are situated in the central part of the island and were sunk to a depth of about 800 feet. Only two derricks were standing at the time of my visit, and the pump at one of these was idle. A small flow of gas was escaping with the oil from the other well. This is piped and utilized in heating a couple of farm houses in the vicinity. These wells were put down near an anticline in the highest part of the island.

The Hepworth Gas Wells.

Hepworth gas wells.

Borings for natural gas and oil were carried on at different places in the counties of Grey and Bruce for some years, but without success. Last year, however, a company called The Grey and Bruce Oil and Gas Company, Limited, was formed and commenced operations in the vicinity of the village of Hepworth. Two wells, starting in the Niagara formation, were sunk into the Trenton limestone. The first

Depth of wells.

(No. 1) was put down to a depth of 1,420 feet and is reported to have yielded 250,000 cubic feet of gas per day. This well gave salt water at 760 feet from the surface. No. 2 well was drilled to a depth of 1,409 feet, going into the Trenton formation 359 feet where gas was found in quantity. The pressure at first was 400 lbs. to the square inch and the flow 500,000 cubic feet a day. The company has recently installed a gas plant and is supplying the village of Hepworth with gas for illuminating and heating purposes. A third well was being sunk which the company hoped to finish this winter. These wells are on lot 1, concession X, township of Amabel, county of Bruce, and near Hepworth station, Grand Trunk railway.

SALT WELLS.

Salt wells.

No changes have of late years taken place in the salt industry of Ontario, further than the sinking of a number of wells at Windsor and the erection of a salt block there by the Windsor Salt Company. This company is now manufacturing 800 barrels of salt a day and practically controls the salt business of Ontario. Salt is manufactured at Sarnia, Clinton, Wingham and Kincardine, but on a smaller scale, as the market is limited.

Extent of salt beds.

The salt-bearing formation of Ontario seems to be of great extent and it contains a number of separate beds of this mineral one above another. Commencing at Kincardine on the Lake Huron shore, they are found to extend southward in a wide irregular belt of country to the St. Clair river, thence across the whole breadth of the south-western part of the Ontario peninsula to Lake Erie, and they apparently occupy a basin extending north-eastward up the Thames valley. The quantity of salt in the area referred to is practically unlimited, and forms an asset among the undeveloped resources of the province which must have a great future value.

WATER SUPPLY.

Water supply.

Although the rainfall in Ontario is amply sufficient to afford a good supply of water everywhere throughout the country, even in those places farthest from lakes and rivers, yet good water for domestic purposes is often difficult to obtain from wells in the solid rock. In districts underlaid by salt beds the water from such wells is usually saline or brackish, the brines permeating the shales and sandstone and sometimes even the limestones. Even where no beds of common salt exist, the waters from the deeper strata are frequently impure owing to the

presence of other ingredients in solution, which sometimes render them unfit for domestic use. Sulphurous waters from such sources are also common. On account of these impurities, some of the towns obtain their water supply from that stored in the thick beds of sand and gravel on the higher grounds and in the banks of rivers and brooks. Where these beds rest on compact Erie clay or upon the boulder-clays, as they sometimes do, the water stored in the former escapes along the line of contact of the loose deposits with the underlying clay. A series of springs may thus occur at or near the foot of a bank where the water may be collected into basins and constitute a considerable water supply. In ordinary seasons, a sufficient quantity may always be obtained in this way, but in seasons of drought or when a destructive fire takes place, a community depending upon such a supply may be awakened to the fact that it is inadequate or at least is not to be depended upon in an emergency, and they seek for means of supplementing that obtained from such sources. This has been accomplished by boring artesian wells in a few cases, but the problem of supplying water to some of the towns in southern Ontario has not yet been satisfactorily solved.

Saline and sulphurous waters.

Cause of springs.

A few towns obtain their water from rivers and filter it through gravel and sand or purify it by other means. But in the thickly settled parts of the country the stream waters have become more or less contaminated from the refuse of the towns and villages along their banks and thus become generally unfit for use. The system of purifying these waters otherwise than by the filtration process mentioued will require to be adopted to render them serviceable or potable. A number of towns pipe their water supply from the nearest lake. Petrolia, for example, has a main laid from Lake Huron.

Water supply from rivers and lakes.

PLEISTOCENE GEOLOGY.

The Pleistocene geology of the part of Ontario under discussion is of unusual interest. The beds are of great thickness and variety, compared with those of other parts of Canada which I have visited, and their origin and history appear to be very closely connected with those of the Great Lakes, over a large part of the region. The Erie and Saugeen clays, and the Artemisia gravels of this region were described by Dr. Bell in the chapter on superficial deposits in the Geology of Canada, 1863, and my observations tended to confirm the accuracy of the description there given. The immense banks of these clays observed often elicited the inquiry in my mind as to where such quantities of materials came from and by what agencies they were brought into their present positions. In many places the beds are from 100 to 250

Pleistocene geology.

Recent formations.

Thickness of beds.

feet in thickness. The surface deposits when examined and studied in detail are found to consist of a series of clays, sands and gravel, which must have been laid down under a variety of conditions. We have here land deposits as well as shallow and deep water beds. A generalized section of the whole series as observed in the Ontario peninsula exhibits formations which may be classified in the following descending order :—

Descending sequence of formations.

1. Clay and sand with gravel near the summit. The whole more or less oxidized and of a yellowish colour. The clay burns to red bricks. This clay often contains calcareous concretions and is met with throughout the whole region from the marine plain at Cornwall and Brockville westward to the higher grounds of the Ontario peninsula. At Prescott and Brockville it contains marine shells, chiefly *Macoma Balthica*, but in the west no fossils have been found in it.

2. Boulder-clay, often thick, but much denuded, underlaid by sand and silt deposits. Iu consequence of the denudation it occurs mostly in detached areas.

3. Arenaceous and silty beds, in places apparently forming upper parts of the Saugeen clay (No. 4).

4. Gray, partially oxidized or brownish clay, thinly stratified, becoming sandy in the upper parts. Fresh water shells occur in the lower part or at the contact with the Erie clay (No. 5). This is the Saugeen clay described in the Geology of Canada, 1863.

5. Stratified bluish-gray clay, sometimes dark in the bottom. It becomes lighter in colour when dry and burns into white bricks. This is the Erie clay described in the Geology of Canada, 1863. In the upper part, it contains fresh water and land shells such as *Campeloma* (sp.,) *Succinea obliqua*, *Polygyra thyroides*, etc.

6. Boulder clay, usually in a thin sheet.

7. Decomposed rock *in situ*, often absent.

8. The surface of the fundamental rock.

Interglacial beds.

The interglacial beds of the foregoing section are often from 100 to 150 feet thick, and it is evident that during their deposition they must have formed land-surfaces in some part of the lacustrine area. The land shells were found not only in the deposits along the Lake Erie shore, but in the clays of Pelee Island ; at the latter place from five to fifteen feet above the level of the lake. The interglacial period appears to have been of long duration.

Glacial striæ were found at the Queenston quarries on the Niagara escarpment, with a direction of S. 48° W. On Pelee island their course is S. 80° W. These groovings were produced, it seems to me, during the second glacial period. Glacial striæ.

CHANGES IN THE LEVELS OF THE GREAT LAKES.

It is evident to any one who examines the terraces and plains bordering the Great Lakes, that Huron and Erie and probably Ontario also, stood at higher levels at the close of the Pleistocene period than they do at the present time. In the subsidence of the waters which followed, the various lakes seem, however, to have reached a level considerably lower than that which they have now. This low-level stage probably occurred in the Recent Period, that is, since the latest of the Pleistocene beds were laid down. I may here give a few of the principal facts showing that this shrinkage of Lakes Huron, Erie and Ontario actually took place as stated. Not having visited Lake Superior I cannot speak of it from personal knowledge.* Levels of the Great Lakes.

1. West of Port Rowan, along the Lake Erie shore, a number of stumps of large trees, probably a score, more or less, were observed, their roots in soil below the lake level while the upper parts (of the stumps) are broken off as if by the lake ice. They are now nearly covered with sand. Stumps below lake level.

2. At Goderich the prostrate trunks of trees are found in the mouth of the Maitland river, ten to fifteen feet below the level of Lake Huron, embedded in the bottom of a layer of clay and marl. It is evident these trunks were laid down when the lake was lower. They were pointed out to me by Mr. Peter McEwen, who was one of the first to call my attention to certain facts connected with the fluctuations of the levels of the Great Lakes. Trunks of trees.

3. The streams discharging into Lakes Huron, St. Clair, Erie and Ontario, as, for example, the Aux Sables, Sydenham, Thames and Grand rivers, and in the Lake Ontario basin, the Humber, Don and the smaller streams to the east, including the Cataraqui at Kingston, have the lower parts of their courses flooded from the lakes. In the case of the Thames and the Sydenham, this condition extends up-stream for many miles, the depth being from ten to twenty-five or thirty feet. With existing levels, it is evident these rivers could not have eroded their channels to these depths. The lakes must, therefore, have been Flooded estuaries.

* See paper on 'The Geological History of Lake Superior,' by Dr. Robert Bell, F.R.S. (Read before the Canadian Institute, Toronto, April 15, 1899.)

at least twenty-five or thirty feet lower at one time to have allowed the rivers to erode such channels. As a filling-up process seems to have been going on since the period of low water, the river channels were probably considerably deeper then than they are at the present time.

SAND DUNES AND SPITS.

Sand dunes and spits.

The spits and dunes along the north shore of Lake Erie seem to have been formed by materials drifted from the west. The point east of the mouth of the Detroit river, the south-west point of Pelee Island, Pelee Point, Rondeau Point, Long Point, Long Island, etc., have all been formed in this way. The movement of the sand takes place along the littoral and to a depth of fifteen or twenty feet in the lake, and is no doubt due to currents caused by the prevailing winds. It affects the mouths of harbours and necessitates the construction of piers and breakwaters, and in some places dredging is required from time to time.

Sand drift.

In the Lake Ontario basin, the sand driftage has apparently been from east to west. Toronto island and Burlington Beach may have been formed by this movement. These beach formations exemplify the conditions which prevailed in the interglacial period in this region when land and fresh water shells were buried together in the clay and sand beds of that time.

WATER SUPPLY OF LONDON, ONTARIO.

Consulted as to water supply of London

On the 11th of November I received instructions to proceed to London, Ont., to confer with the Water Commissioners of that city respecting its water supply. Two or three days were spent in company with Mr. John M. Moore, C.E., the superintendent and engineer, in examining the sites of the different wells and springs in the vicinity and collecting all the information available concerning them. Although there is no immediate danger of a shortage of water in this city, yet in view of its growth, both in regard to population and business, it was considered advisable by the commissioners to obtain the best advice possible about providing for an increased supply in the future.

Source of present supply.

The water supply of London is obtained from a number of springs on the banks of the river Thames, two to three miles below the city, at a place called Springbank. The surface formations there are gravel and sand, 200 to 300 feet thick, underlaid by a clay hardpan. These gravels and sands serve as a storehouse for the rainfall, a large part of which, after seeping through them, escapes into the river valley in the form of springs along their contact with the underlying clay. This

spring water is collected into large basins or ponds which are connected with a pumphouse, and are thence forced into a reservoir 276 feet above the water works datum from which the city main receives its pressure.

Wells in solid rock.

In our investigations, it was found that the wells sunk into the solid rock here do not yield potable waters. Wells of this kind have been drilled at the water works pumphouse, at the junction of the north and south branches of the Thames, at Carling's Brewery, and at the Insane Asylum. In the first three the waters were sulphurous ; in the asylum well (2,250 feet deep) the borehole had to be closed at the bottom of the surface deposits, and the supply of water obtained by that institution is now derived from these deposits, occasionally supplemented from a pond near by.

Doubtful use of artesian wells.

Although the Water Commissioners of London were anxious to have one or more deep artesian wells bored near the city, yet in view of the above mentioned facts, I did not feel warranted in advising them to sink any.

Thames water might be used.

Instead of this the scheme of obtaining a supply of water from the river Thames was urged upon them, but though quite practicable, they contended that it involved the erection of an entirely new system of waterworks, besides the employment of filtering and purifying processes, all of which the city could not afford at present.

Copious springs.

The only other sources from which water was obtainable in quantities sufficient to supplement the present supply, were new springs and wells in the surface deposits. On the North Branch, about four miles above the city, there are springs which have been computed to yield 850,000 gallons a day. The water from these could be pumped into the street main now in use. A further addition might be obtained by sinking wells in the surface deposits near the junction of the North and South Branches, also in a flat in the valley of the latter, below the Port Stanley railway bridge. At both of these points I recommended test wells to be put down to ascertain the quantity and quality of the waters, both in the recent surface beds and the underlying solid rocks.

Acknowledgements.

I desire in closing to express my sincere thanks to Messrs. James Kerr, of Petrolia ; Peter McEwen, of Goderich ; John Corrie, of Stratford ; Jno. M. Moore, C.E., of London ; E. P. Rowe, of Hepworth ; J. S. McLister, of Bothwell ; J. W. Cuthbertson, of Tilsonburg ; D. A. Coste, of Buffalo, N.Y., and others for information and various acts of kindness.

The District around Kingston, Ontario.

Dr. R. W. Ells.

Work by Dr. R. W. Ells.

The winter of 1900-01 was spent in plotting the work of the preceding year and in revising the surveys made by the late Mr. N. J. Giroux during the years 1895 and 1896, the greater part of which was put into shape for the final compilation. The area included in these surveys by Mr. Giroux extends from the Ottawa river to the River St. Lawrence, east of a line from Ottawa to Prescott.

Two reports were also written, viz., that on the map of Ottawa city and vicinity, and a revision of the report on the area included in map-sheet No. 121 of the Ontario and Quebec series, comprising the area along the lower Ottawa and extending north from that river for about fifty miles.

Field work for 1901.

Field-work for 1901 began on May 24, when, in company with Mr. R. Chalmers, nearly two weeks were spent in examining the clays and other surface deposits between Prescott and Kingston in order to search for marine shells in that district. In this connection it may be stated that these shells were found as far west as Brockville, where they occur quite plentifully in two brickyards in rear of the town, and also at an old brickyard on the road to Tin Cap, about four miles north-west of the former place. West of this, though the clays present many features similar to those seen at Prescott and Brockville, no marine organisms have yet been observed.

Surveys made along Rideau lakes.

On June 6th work was commenced with two assistants, Mr. R. Hugh Ells, B.A., and Mr. W. L. Lodge, M.A., in the area adjacent to the Rideau canal between Oliver's Ferry and Kingston. A careful examination was made of the numerous lakes along the entire route, and a number of mica and iron deposits were examined at several points in order to compare the conditions there existing in connection with these minerals, with those found in the area north of the Ottawa river.

Route from Jones Falls to Gananoque.

From Jones Falls a route was followed, by way of the village of Morton, the Beverly lakes and the Gananoque river, to the town of Gananoque, on the St. Lawrence, and a number of road surveys were made in the country adjacent in order to fix the boundaries of the sandstone outliers in this direction. Returning to the canal at Seeley's bay, the country to the west, including the townships of

Storrington, Loughborough and Bedford was carefully studied and the area north to the Devil's lake was examined, the canal being again reached at Mud lake, near Newboro'. This district is an important one, owing to the presence of numerous deposits of mica and iron at a number of points.

Kingston and vicinity.

Returning to the St. Lawrence again, surveys were made of the roads in the townships of Pittsburgh and Kingston, in the former of which a number of scattered outliers of the Palæozoic rocks are seen. An examination was also made of the shores and islands in the river between Kingston and Gananoque, at which place the examinations of last year ended. The contacts of the overlying Cambro-Silurian limestones and sandstones with the crystalline rocks are numerous and show some interesting features. The waters of Lake Ontario were found to be too rough for small canoes, and the work was carried on by land for the remainder of the season using a buckboard, with odometer attachment for registering the distances. In this way over 1,000 miles of roads were surveyed, principally in the counties of Frontenac and Addington. This work was in charge of my assistant, Mr. Hugh Ells, by whom the surveys in the area north of Lake Ontario were connected with the Canadian Pacific railway and with those made further north in 1896. My other assistant, Mr. Lodge, was transferred, early in July, to another Geological Survey party.

Prince Edward county.

An examination was made of Amherst island and of several other islands in the vicinity, as also of a large part of the peninsula of Prince Edward county and the country along the Bay of Quinte as far west as the town of Trenton, which is just west of map-sheet No. 112, to which the season's work was mostly confined. In part of this work I was accompanied by Dr. H. M. Ami, who made a study of the fossils of the Black River and Trenton formations and obtained large collections from a number of localities.

After Dr. Ami's return to Ottawa several weeks were devoted to an examination of some of the principal mining locations, especially with reference to the mica deposits, some of the mines of this mineral being among the most important yet found in Canada.

I returned to Ottawa towards the end of August and was there detained for several weeks in correcting proofs of the two reports on the geology of the areas along the Ottawa river, but the work in the Kingston district was carried on by my assistants till September 20th, the surveys westward being connected with the Canadian Pacific railway at Tweed station. Subsequently several short excursions were made in the vicinity of Ottawa to complete details of structure in connection with the map of this area.

Work of Mr. Alexander Murray.

The previous work of the Geological Survey in the Kingston and Belleville district was done by Mr. Alexander Murray, in 1852. The results were published in the Annual Report for 1852-53, now out of print, and a large amount of interesting and valuable information, is there given relative to the distribution of the sedimentary formations which are for the most part of Black River and Trenton age, underlain in places by sandstones, which at that time were supposed to belong to the Potsdam formation. Certain shales and arkose layers, resting upon the crystalline rocks at different points, with overlying beds of cherty limestones, were supposed to pertain to the horizon of the Chazy. The characters of the several divisions of the crystalline rocks which underlie these formations are well stated by Mr. Murray in the report referred to.

Limestones of the Kingston district.

Among the important points to be determined in connection with the geology of the Kingston district is the age of the limestones which have a wide development about Kingston city, and throughout the area to the north and west, and their proper stratigraphical relations to certain sandstone deposits which underlie these at a number of localities. In places the limestones, which become interstratified with greenish-gray marly shales in their lower portion, rest directly upon the underlying reddish granite or other crystalline rocks; but at many points there is an intervening deposit of greenish, sandy and calcareous shales and grit, generally quite thin and rarely more than a few feet in thickness. When these beds rest directly upon the crystalline rocks they often contain small pebbles of granite and quartz and are made up of the decomposed materials of the underlying rocks, with the aspect of a true arkose. They apparently form the lowest member of the limestone formation and sometimes hold fossils, chiefly small orthoceratites and a species of *Leperditia*.

Arkose beds at base.

The contact of the limestones with the granite is well seen near the summit of the ridge in Barriefield, opposite the city of Kingston, where the calcareous strata are sometimes tilted in every direction at angles varying from ten to twenty degrees, the inclination being apparently due to conditions of deposition on a rounded underlying surface. On the shore of Deadman's cove to the east of Barriefield hill, there is a thin underlying deposit of the green arkose filling the irregularities in the granite surface and passing directly upward into the limestone.

Road between Gananoque and Kingston.

The shore road from Gananoque to Kingston shows these limestones at several points. That they are of Black River age, is proven by the presence of characteristic fossils of that formation almost to the very base of the series. Along the Gananoque road the underlying shales

sometimes rest upon the beds of sandstone, which are sometimes reddish but generally gray in colour. They somewhat resemble the Potsdam sandstone in the area north of Brockville, but as a rule, are rather less siliceous. They are also well seen along both sides of the Rideau canal between Kingston Mills and Washburn, where they have a thickness of nearly fifty feet. Large outcrops of the sandstone are also seen around the shores of Dog lake in the township of Storrington, and at Battersea. The lower portion of the formation is frequently a conglomerate containing pebbles of quartz and sometimes of granite. As a rule the sandstones are in nearly horizontal layers, but sometimes, owing apparently to deposition on a sloping surface, the strata are inclined at an angle of ten to twenty degrees.

Age of the Kingston limestone.

In physical characters, the lower portion of the limestone formation north of Kingston resembles some of the limestones of the Chazy formation of the Ottawa district. They are highly dolomitic, hard and cherty, breaking with a sharp conchoidal fracture, and certain layers resemble a true lithographic stone. The lower part of the formation contains but few fossils, though organisms referable to the horizon of the Black River limestone are sometimes found. Among these, a species of *Leperditia* is somewhat abundant, and scattered forms of *Tetradium fibratum* also occur which serve to fix their position fairly well. The lower hundred feet contains interstratified beds of marly shales, sometimes several feet in thickness, while the upper part of the formation is a heavy bedded limestone filled with large fossils, such as *Columnaria Halli*, *Actinoceras Bigsbyi*, *Stromatocerium rugosum*, large masses of *Tetradium fibratum*, and other characteristic forms. The thickness of the entire series in rear of Kingston is somewhat over 200 feet above the basal beds of sandy and marly shale or arkose.

Thickness of Black River limestone.

At Kingston Mills on the Rideau canal, the contact of these rocks with the underlying granite and gneiss can be well seen about 200 yards west of the canal on the line of the Grand Trunk railway, where in a cutting there is a direct superposition of the green marly shales on the granite. These green basal beds near their contact with the granite are highly fossiliferous, the principal fossil as yet found being a small orthoceratite. To the east of the canal the limestones are seen along a road south of Rideau station, the rocks here having a low anticlinal structure, owing apparently to deposition upon a boss of red granite which is exposed near by. Black River fossils are here found down to the very base of the limestone. In this area no trace of the underlying sandstone is seen.

Contacts near Joyceville.

The outcrops of sandstone, already referred to as occurring along the canal above Kingston Mills, can be well studied at what is known

as Gildersleeve's quarry on the east bank, about four miles above the locks. This deposit can be traced to the north-west as far as Joyceville corner, where the sandstone rests directly upon granite and gneiss, and dips S. 20° E. < 4°. The breadth of the sandstone along the road south of the corner, is several hundred yards and on this road it is directly and conformably overlaid by the Black River limestone, with interstratified shaly bands holding the characteristic fossils of that formation. The limestone here forms a low escarpment north of the road near a church, the dip being precisely the same as seen in the sandstone. It extends south-east for a mile and three-fourths, and at that distance is again underlain by the granite and gneiss, the sandstone not appearing in this direction, so that the limestone apparently occupies a shallow basin at this locality. Along the road down the east side of the canal, traces of the underlying sandstone are seen beneath the limestone, at a distance of about four miles north-west of the corner east of Kingston Mills.

Gildersleeve's quarry.

At the quarry the rock shows much false bedding, but some of the layers are massive and well suited for building stone, for which purpose it has been quarried somewhat extensively. The colour is in places a dark red, but in the upper part of the escarpment grayish shades prevail. In portions scattered pebbles of quartz occur and the rock forms a conglomerate. This rock resembles the sandstones of Potsdam age near Ottawa, and along the shores of Rideau lake, where it is directly overlaid by the Calciferous formation. It is soft when quarried, becoming hard after removal from the parent bed ; in this respect resembling freestones of Carboniferous age. In the quarry several curious cylindrical concretions occur which resemble the trunks of fossil trees, and at one time they were regarded as such. They stand upright in the face of the quarry, the two principal ones having diameters of three and four feet, with an outer zone of three inches or more in concentric layers, corresponding to what would have been the bark if the structure had been organic. At the top of the cliff the upper ends of these concretions are slightly hollowed out, readily distinguishing them from the surrounding rock. The material of the cylinders is similar to that of the quarry rock. Numerous rounded concretions, from half an inch to two inches in diameter are found in the vicinity of the supposed trees, which by some persons have been regarded as the fruit. Rounded concretions of this kind are found in similar sandstones on the southern end of Knowlton lake.

Cylindrical concretions in quarry.

Unfortunately there is no fossil evidence from the sandstones themselves to fix their age, except the occurrence of certain markings resembling *Scolithus*, and this is not sufficient of itself to accurately determine horizons.

Age of the sandstones.

If we reject the early view of Murray as to the Potsdam age of these sandstones and classify them, on stratigraphical grounds, as a sandy local development at the base of the Black River formation, then it may be stated that no trace of the true Potsdam, Calciferous or Chazy formations has yet been recognized in the district west of a line from Gananoque to the upper Rideau lakes. This was the view apparently held by Mr. Eugene Coste in regard to similar sediments in Madoc and Marmora, which form part of the Palaeozoic outliers occurring there. On the map of that area, made in 1886, these were coloured by him as belonging to the Bird's Eye and Black River formations. Why the lower formations should not have been deposited throughout this western area is not clear, there being no apparent cause for their absence, since the Calciferous is extensively developed throughout the district extending north from Brockville to the upper Rideau lake, and thence eastward to the Ottawa, where it is in turn overlaid by sediments of Chazy age.

Development near Westport.

These sandstones have now been traced by numerous outcrops from the West Rideau lake near Westport, where they undoubtedly represent the western extension of the great Potsdam-Calciferous area of the Ottawa basin, southward to the St. Lawrence near Kingston. At Westport the sandstone rests upon the granite or other crystalline rocks, and passes upward through the Calciferous and Chazy formations into the Black River limestone. Along the Rideau canal south of Newboro', and in the area both to the east and west, while the sandstones and conglomerates present the same general aspect as is seen in the Rideau lake district, the strata of the Calciferous and Chazy, proper, appear to be absent entirely, at least in so far as has yet been ascertained, and the Black River limestone and shales rest either upon the sandstone or directly upon the crystalline rocks, with merely the occurrence of a thin deposit of arkose beds at their base.

Conformity to the sandstone.

The apparent conformity of the limestones to the sandstones can not be regarded as conclusive evidence that they all belong to the same series; since everywhere throughout the Palæozoic basin of the Ottawa and St. Lawrence rivers these sediments are generally in a nearly horizontal attitude throughout. Under the circumstances therefore or until more conclusive proof is furnished from the study of these rocks, we hold that it will be better to regard these basal sandstones and conglomerates as more properly belonging to the Potsdam sandstone formation, as originally suggested by Murray, than to the Black River limestone division.

Black River formation west of Rideau canal.

The outline of the Black River formation west of the Rideau canal, in the direction of Tamworth and Tweed, is somewhat irregular. At several points deposits of the green arkose occur, but the limestone often rests directly upon the crystalline rocks. The sandstones are rarely seen west of the line of the Kingston and Pembroke railway. They are however well exposed at several points in the townships of Loughborough and Storrington, and on the railway at a point about two miles north of Hartington station, there is a good contact of the limestones and the green shales upon the underlying sandstone, the whole series being a conformable one all the way upward from the contact of the latter on the granite. Around the shores of Dog lake in the former township, the sandstones are well displayed and at one point on the north side contain several large but pockety deposits of red hæmatite which have been mined to some extent. At Battersea also the sandstones are well seen on the red granite in nearly horizontal ledges to the north and east of the village, but on the south side the granite on the road is covered by the green arkose which passes directly up into the cherty limestone.

Contact at Battersea.

To the south of the road however, the greenish beds rest upon the sandstones which fill up irregularities in the underlying gneiss and granite. The gneiss at this place is very quartzose and in places rusty, and it has been penetrated by the granite mass.

Howe island.

On the islands lying in the St. Lawrence between Kingston and Gananoque, notably on Wolfe and Howe islands which are the largest, several good contacts are seen. On the north-east end of the latter, which is several miles above Gananoque, ledges of sandstone occur, in places resting upon the granite and filled occasionally with pebbles of white quartz. These are overlain by the green, gray and black shales, which are found at the base of the cherty limestones, near a small cove known as Bush bay, about two miles from the lower end of the island. The beds are all horizontal. Some of the shaly layers are very like certain green Chazy shales of the Ottawa basin, but are not quite so hard or slaty. They pass directly up into the limestone which contains Black River fossils. and which thence occupy the whole of the island along the south side. On a road across the island from Bush bay, the Black River limestone rests upon white quartzite about midway to the north shore. The quartzite is penetrated by red granite, and the latter is seen along the north side of the island below the mouth of Big bay. The south-west part of the island is all Black River limestone.

Contact of Black River limestone with quartzite.

On Wolfe island the Black River limestone is the prevailing formation. It is seen in low ledges along the shore where this is not occupied by clay or sand. Wolfe island.

The northern part of the island is occupied by the cherty variety with shaly layers, but near the village of Marysville the upper portion of the formation is well seen and contains great numbers of fossils in which *Tetradium fibratum* is abundant. These rocks extend south of this to a point opposite the north end of Simcoe island, when they are overlaid by limestone of Trenton age. The rocks of the Trenton formation apparently occupy all the western end of the island and are well seen at Bear Point at the south-east extremity, from which a large collection of fossils has been obtained. The rocks of the island are all so nearly horizontal that dips cannot be measured.

Simcoe and Horse-shoe islands off the west end of Wolfe island are both occupied by fossilferous sediments, partly of Trenton age. Garden island, which lies off the city of Kingston, is composed of Black River limestone. Further west, Amherst island and the whole of the peninsula of Prince Edward county, are apparently entirely occupied by the Trenton formation, which abounds with fossils everywhere. Simcoe and Horse islands.

The Black River formation, seen at Kingston, continues westward along the shore of Lake Ontario as far as the village of Bath, where it is overlaid by the Trenton limestone. The latter thence extends across the peninsula of Adolphustown to Deseronto, where basal beds holding *Receptaculites* are seen in the bed of Sucker creek, about half a mile south of the Grand Trunk railway near Deseronto junction. The outline of the formation north of this is somewhat irregular and the Trenton limestone occupies basin-shaped areas upon the Black River to the north of Napanee whence it extends north-west into Tyendenaga township. The Black River limestone shows in a bold escarpment on the west line of the township of Richmond, about six and a-half miles north of the Bay of Quinté and a short distance south of the crossing of Salmon river, whence the southern boundary of the formation continues south-easterly to the shore of the bay. The rocks are well exposed near Shannonville station on the Grand Trunk railway, where there is a boss of granite and quartzite upon which the newer limestone is deposited. The Black river limestone forms the north side of the Bay of Quinte at Ox Point, about three miles east of Belleville, and large and valuable quarries are here located in the massive beds near the summit of the formation. The opposite shore in Prince Edward county, at Massasauga Point, is of Trenton limestone. At Ox Point the strata are, in places, inclined at an angle of ten to fifteen degrees, probably indicating an underlying boss of the crystalline rocks. Kingston and Adolphustown. Shannonville station G.T.R.

Belleville.

The Trenton comes into view west of this place in a cove and is again seen at Belleville on the Moira river and northward along this stream for several miles, the exact contact with the Black River formation not yet being traced in this direction. From the Moira river the Trenton continues along the north side of the Bay of Quinté and is well seen in low-lying ledges in rear of the town of Trenton, which is just beyond the western limit of map-sheet No. 112.

Arkose beds of Rideau lake.

The arkose in the Kingston district differs somewhat from that seen along the shores of Rideau lake where it is well exposed along the south side near what is known as the Narrows. Here the Potsdam sandstone and the overlying Calciferous are well developed, but the basal beds in the lake district sometimes consist of a coarse conglomerate made up of pebbles of gneiss, granite, quartzite and crystalline limestone, some of which are at least two feet in their greatest diameter. All these pebbles are water-worn are are cemented by a sandy and calcareous paste. No conglomerates of this character have been recognized anywhere west or north of Kingston except at one place on lots 3 and 4, ranges VII and VIII, of Loughborough township, where a four feet bed of coarse conglomerate was recorded by Murray in 1852 as resting on crystalline limestone.

Red hæmatite.

The colour of the Potsdam sandstone around Rideau lake, as also of the sandstones in Kingston district, varies from red to gray, the former colour being due to red hæmatite which sometimes forms masses of considerable extent, capable of being locally mined. This hæmatite character is also seen in the Kingston area at several places, the ores being generally pockety masses, sometimes of large size, near the contact with the crystalline rocks.

Crystalline rocks.

North of the area occupied by the Black River limestones the crystalline rocks are well seen. They consist of gneiss, quartzite, limestone and schists, the whole resembling what is known in the province of Quebec as the Grenville series and in Ontario as the Hastings series. They lie in a number of undulations and are broken across at many places by masses of generally red granite which are newer than the schist and limestone. Masses of dioritic rock, pyroxene, and large dykes of pegmatite are common throughout the area occupied by the crystalline series.

Surface deposits.

Along the contact in the vicinity of Tamworth are heavy deposits of sand, gravel and boulders which may represent in this direction the extension of what has been called the 'Iroquois beach' which is so well developed north of Toronto. No fossils have been found in any of these deposits, nor in the clays west of the Rideau canal.

Valuable mineral deposits are found in the district, more especially in connection with the crystalline rocks. In the Black River limestone,

north of Kingston, there is a somewhat remarkable fissure extending across the country for several miles which has been filled with baryta, the thickness of the vein ranging from a few inches to over three feet in places. The mineral is grayish white and has been opened up on lots 16 and 17, range IV, of Kingston township, and is seen also on lots 15 and 16, of range V. The vein crosses the lots in a north-east and south-west course. An interesting feature in this vein, which is vertical, is the presence of small quantities of anthraxolite in connection with the baryta. Baryta vein near Kingston.

Anthraxolite was also noticed from a vein, apparently cutting red granite, at a point about one mile west of Chaffee's lock, on the north side of Opinicon lake. The material is very pure, almost pitchy in character, and ignites readily with a match. It is found in the debris thrown out by some animal in excavating through the drift at the foot of the granite ledge, the vein itself not being seen. Anthraxolite.

The iron ores which occur in connection with the sandstone have already been referred to. The deposits of hæmatite are found principally at Dog lake, which connects with the Rideau canal a short distance north of Brewer's locks, and at several points along the north side of Opinicon lake. At the latter place borings have been made with a diamond drill to a depth of several hundred feet. The ores occur in the sandstone near the contact with crystalline limestone and the deposits appear to be pockety in character. Another deposit of red ore is seen near the road a short distance west of the lake on the north half of lot 13, range XIV, of Storrington. The outcrop here is uncovered for a space of about seven feet square and the extent of the deposit is unknown. The other deposit is on lot 2, range XIV, Bedford. Iron ores.

The principal mining industry in the district at present is the production of mica. This mineral is found in connection with the pyroxene rocks at a number of places in the townships of Loughborough, Storrington and Bedford especially, and in the Rideau lake district in North and South Burgess and South Crosby. Mica deposits.

Mining has been carried on for a number of years at various points in the district, and a study of some of the principal deposits was made for the sake of comparison with those which occur on the north side of the Ottawa. The conditions appear to be the same in both these mining districts. The principal deposits are found in two forms, viz., in fissures in the pyroxene itself, where the mica crystals occur often in large masses, apparently segregated from the containing rock, in which case, calcite so often found elsewhere in association with mica is almost entirely absent; and secondly, as contact deposits in the Mode of occurrence of mica.

pyroxene, near the junction with the gneiss rock, in which case the mineral is usually associated with more or less calcite. Good illustrations of the latter mode of occurrence are seen at the Stoness mine near the lower end of Buck lake, on lot 4, range XII, Bedford, where an incline shaft, which is on a slope of 45 degrees, has reached a depth of about 450 feet and where the rock of the dump from the principal mine is almost entirely composed of calcite. At this mine several cross dykes of dark diabase cut the deposit.

General Electric Co's Mine, Sydenham.

Of the fissure type of veins, that of the General Electric Company near Sydenham, on lot 2, range VII, Loughborough, is a good example. Here calcite is almost entirely absent in the dump, and the pyroxene, which is of a light green colour, forms a large dyke cutting transversely across a grayish and sometimes rusty gneiss. On the south-west side of the main pit there is a heavy dyke of hard blackish diorite rock or a dark hornblende granite which in some parts gives place to a pinkish red. This forms the foot-wall of the principal vein, which here dips to the northeast at an angle of 60° to 70°. The vein consists of masses of crystals of amber mica, often of large size, some of them being as much as five feet across the face. It is generally of excellent quality and comparatively free from fractures. The thickness of this deposit is from ten to fifteen feet. Along the foot-wall are occasional small lenses or patches of calcite, pinkish or gray in colour. The mica deposit is therefore of very large size, and the vein appears to fold over the crest of the large diorite dyke. Small quantities of green apatite are found in the pyroxene.

The McLaren and Fulford mine, South Crosby.

At the McLaren and Fulford mine east of Davis lock, on lot 15, range VII, South Crosby, which was opened some twenty years ago as an apatite mine, and re-opened in 1900 for mica, the country rock is a reddish-gray gneiss, much intersected by granite. At the opening there is a heavy dyke of dark hard diorite which intersects the pyroxene, and in the excavation the mica vein sometimes widens to a thickness of eight to ten feet, many of the crystals being of large size. Bunches of iron pyrites are found in places near the edge of the vein, and when this occurs the good quality of the mica is seriously affected, it becoming much broken and discoloured. Apatite, both red and gray in colour, occurs in some abundance and there is a small quantity of red hæmatite in parts of the excavation. Small bunches of pink calcite also occur. The output of mica is large and its quality fairly good.

Tett's mica mine.

At Tett's mine, which is about three miles from the upper end of Devil's lake, on lot 2, range VIII., Bedford, the country rock is also a reddish and reddish-gray gneiss with bands of rusty gray gneiss, the

strike of which is about N. 50° E. and the dip to the north-west. This is cut by a heavy dyke of light-green pyroxene which is in turn cut by a very hard grayish granite. The mine is opened by a series of pits in the pyroxene, but as unfortunately these were filled with water at the time of our visit, the relations of the mica could not be clearly ascertained. The output is, however, stated to be very considerable, and the crystals of large size. There is but a small showing of calcite at this place, and the pyroxene cuts directly across the strike of the gneiss, the mica occurring apparently as a contact deposit near the junction of the gneiss and pyroxene. Bunches of iron pyrites occur in the hard pyroxene and the course of the dyke is about north-east. Large crystals of pyroxene are found at this place.

Smith and Lacey mines.

At the Smith and Lacey mines on the north side of Opinicon lake, the country rock is largely a rusty gneiss which is cut by several dykes of pyroxene, some of which are of large size. No pink calcite was observed at this place, but there is an abundance of light greenish-gray rock, apparently a felspar on the dumps. The mica is of large size and good colour and apparently very abundant at some of the openings, but as no work was being carried on at the time of our visit the chances for observing the relations were not very good. The mica appears to occur in fissures in the pyroxene.

The above descriptions of the leading mica deposits serve to show that the conditions at these mines are almost identical with those already described as occurring in the area north of the Ottawa. There are a number of other deposits in the district, some of which appear to be of excellent quality, but these were not examined owing to the lack of time.

Iron deposits of the Kingston district.

The iron deposits are of two kinds, and have been well described in the report by Mr. Ingall on the ores of the Kingston and Pembroke district. It is not necessary to refer to them in detail in the present summary. Of these the magnetites are associated with the crystalline rocks, generally in connection with masses of intrusive rocks, which cut the gneiss and limestone of the district. The hæmatites, on the other hand, are usually found associated with the sandstones, which have been already described. They are of a different origin, and some of them have already been referred to on a previous page.

Felspar deposit of 13 Island lake.

In connection with a number of the granite dykes which everywhere abound in the area of the crystalline rocks, notably in the pegmatites, large masses of pink felspar are found. Among these the most important yet noted are at a locality on lot 1, range II., of Bedford, near the shore of Thirteen Island lake. The felspar from this location is

beautifully clear and apparently largely free from iron. It is quarried and shipped from Bedford and Verona stations, on the Kingston and Pembroke railway. The quantity is said to be almost unlimited. The distance of the mine from Bedford, by winter road, is about four miles, and from Verona, by the regular road, about seven miles. Other large deposits of this mineral occur in the vicinity. The principal mine has been worked by Richardson and Smith.

Felspar of Kingston mills.

Another similar deposit of felspar occurs in the granites near Kingston Mills, and it has been worked to some extent. The quality at this place is also excellent.

Lead mines.

No new developments have been made in the lead deposits, of which several are found in the townships of Lansdowne, Bedford and Loughborough.

Talc.

A deposit of talc has recently been opened and mined to some extent near the road from Gananoque to Kingston and about three miles from the former place. Work on the deposit of this mineral on one of the islands, in Rideau lake, a short distance from Portland, has been discontinued.

Limestone quarries.

Large and valuable quarries have been opened in the limestones of the Black River formation at Kingston, Wolfe Island, Napanee and a number of other points throughout the district. At Deseronto, a large quarry is located in the Trenton limestone about a mile north of that town. The quarry at Ox Point, near Belleville, in the upper part of the Black River formation, has already been referred to.

Sandstone quarry.

The sandstone of Gildersleeve's quarry on the Rideau canal furnishes an excellent building stone. Some of the output has been shipped to Montreal, and a number of houses and public buildings in the neighbourhood of Kingston have been constructed either wholly or in part of this stone. The effects of the red stone in combination with the gray limestone is very good. At present the quarry is not worked.

Copper, gold, actinolite, zincblende.

Mines of copper and of gold have been opened in the neighbourhood of Flinton, in the northern portion of the area. No work was being done at these during the past season. A deposit of actinolite has been worked to some extent near the road between Flinton and Kaladar, and a number of tons of the mineral have been extracted. A deposit of zincblende occurs in Olden on the north side of Long lake, from which about 100 tons of ore have been taken.

Shell-marl.

Shell-marl is found in the bottom of many lakes throughout the area north of Kingston. A large part of Loughborough lake is underlaid by this substance, more especially in the western half. In Mr. Murray's

geological report for 1852–53, it is stated that the bottoms of all the lakes from this to White lake in Olden, are more or less of the same substance. It was also found in White lake in Sheffield, and on the brook which flows from it to Beaver lake; but the largest and most available deposits met with were on Mr. McDonnell's property, on the 15th and 16th lots of the second concession of Sheffield, and on the 12th lot in the third and fourth concessions of the same township. The deposit on Mr. McDonald's place, extends over an area of 200 acres and perhaps more, with a thickness over the greater portion, of at least ten feet, which was proved by pushing a pole of that length through it in various places, without striking any other material. On the surface there is a thin soil, bearing a luxuriant growth of prairie grass. Mr. Murray says:—

Deposit in Sheffield township.

'The marl on the 12th lot of the third and fourth concessions, extends over at least 300 and perhaps 400 acres or more, but its thickness I could not ascertain. The place where it occurs is mostly a marsh or swamp, and the deposit is covered over by an accumulation of peat, averaging about four feet in thickness.'

Mr. A. Murray quoted.

A large deposit of marl of excellent quality which occurs near Marlbank in the township of Hungerford, has been used for some years in the manufacture of Portland cement. The marl occurs in the dry bed of a lake with an extent of about 150 acres and a depth in places of not far from thirty feet. The cement works are located in close proximity to the deposit at Marlbank, but a second manufacturing plant has recently been established at Strathcona, six miles east of Napanee on the line of the Bay of Quinte railway, the raw material being brought from Marlbank. This location is admirably adapted for the purposes of manufacture, being near the line of railway.

Marl deposit at Marlbank.

Petrography of Shefford and Brome Mountains.

Principal J. A. Dresser.

In accordance with the plan of the Geological Survey to complete the petrographical examination of the series of remarkable volcanic hills which crosses the St. Lawrence valley from Shefford and Brome to Rigaud, investigations have been continued during the past season on Shefford and Brome mountains. The unusual character of these hills has been mentioned in several earlier reports of this Survey, especially those for 1863 and 1894, but it is only recently that detailed petrographical examinations have been begun.

Petrographical investigations by Prof. J. A. Dresser.

Work facilitated by private investigations.

This work is likely to be greatly facilitated by private investigations. Mr. O. E. LeRoy, B.A., McGill University has already presented the results of a very complete examination of Rigaud mountain to the Geological Society of America at the winter meeting of 1900. Therein he shows that this mountain is more likely connected with the porphyry intrusion at Grenville than with the present series. A petrographical description of Mount Johnson of this series by Dr. F. D. Adams will soon appear, while similar work at the hands of Professors Harrington and Adams has been in progress at Mount Royal for some time. Mr. LeRoy has also the examination of Belœil mountain well under way. There therefore remain Yamaska, Rougemont and Montarville yet to be studied; also Calvaire, should preliminary investigations prove it also to belong to the series. In all cases, the results of these detailed researches have shown that these hills are of rare geologic interest.

Shefford mountain report.

The report on Shefford mountain has been completed and was placed in your hands in May last, while in the months of July and August, the field-work necessary for the completion of a similar report on Brome mountain was carried out. In previous summary reports it has been stated that Shefford mountain is an elevation covering some nine square miles in area in the county of Shefford. It has been caused by three successive volcanic eruptions, the lavas of which have formed rocks of rare types in each case. A careful microscopic study of over one hundred specimens of these rocks has been made, and also a complete chemical analysis (by Mr. M. F. Connor, B.A., Sc., Radnor Forges, Que.) of one

Igneous rocks.

of the main types. The first (in point of age) of these igneous rocks is found to be essexite. It forms two masses in the mountain, the later rocks having probably been thrust up through the original body, thus dividing it into two parts. One comprises the locality of Coupland's lake and thence extends northward to the edge of the mountains near Shefford Mountain post office. The other extends along the margin of the mountain from Beauregards corner to McCutcheons road and includes the important rock of Morriseau's quarry.

The second rock is a variety of syenite distinguished as Nordmarkite in its type occurrence, which is in southern Norway. It forms all the

Dounan's quarry.

marginal part of Shefford mountain not occupied by essexite. A contact phase of this is the rock at Dounan's quarry, which proves to be of unusual value for monuments and other decorative work for which granite or syenite is commonly employed. The possibilities of this quarry were mentioned in a summary report for 1900. Since that report was written, however, the quarry has been acquired by Mr. C. J. Hill, of the Granite and Marble Cutting Works, of Richmond, who has in a couple of weeks' preliminary work already taken out a quantity of

material which, when polished will have a value of about $3,000. From the success thus met with Mr. Hill contemplates the dressing of the rock at the quarry and possibly the erection of polishing works there as well. Other portions of both these rocks seem to be well suited for economic purposes.

The third rock is pulaskite, also a rare syenitic type. It forms a smaller part of the mountain and extends from Coupland lake south-eastward over the highest point above Knotts corner. It here terminates in a point at the south, being scarcely two hundred yards wide where crossed by the mountain road. A summary sketch of the rocks of Shefford mountain was published by your permission in the October number of the *American Geologist* of the current year.

Area of Brome mountain.

Brome mountain embraces an area of about thirty square miles in the townships of Brome, East Farnham and Shefford, which belong respectively to the counties of Brome, Missisquoi and Shefford. The central portion in the vicinity of Brome pond consists of a rather level basin about two and a-half by two miles in extent, which is generally overlain by heavy beds of clay, and is surrounded by a nearly continuous rim of hills rising from 600 to 1,000 feet above the level of the surrounding country. At West Shefford station this level is 440 feet above mean sea-level. The interior is well cleared, while the hills are all wooded; yet, as most of them are used for pasture lands, the highest points were generally found well enough exposed to afford fairly satisfactory conditions for geological study.

Drainage of area.

The drainage of almost the entire area is towards the south-west. Brome pond, a small sheet of water some three-quarters of a mile in length and half as wide, lies in the lowest part of the interior basin, and is drained into the Yamaska river through an opening in the hills known as Glen Farnham. No definite information was obtained as to the depth of the pond. Fed by a brook whose dimensions are not much less than those of the outlet, it must be largely a drainage lake. Yet, as it lies at the contact of two different igneous rocks, and as springs are common along these contacts, the pond probably derives some of its waters from underground sources. Two other ponds, known as Gales and Silver spring or Bull's pond are each about half as large as Brome pond. They have much smaller drainage basins, with much less sediment along their banks, and are presumably more largely fed by subsurface inflow.

Earlier reports.

In the earlier reports which have been referred to, it has been shown that Brome mountain is of igneous intrusive origin. The surrounding sediments have been shown by Dr. Ells, in the annual report of

this Survey for 1894, to belong to the Sillery division of the Cambrian system and to the Phillipsburg series (D 2 b) of the lower Trenton.

The mountain was first crossed in two directions, first, from West Shefford village to the 'centre road' between Sweetsburg and Knowlton, and next from Tibbetts hill to Gale mountain, thus giving two complete sections across the area. The contact with the enclosing sediments was next traced out as carefully as possible, and finally the different rock masses which comprise the igneous part of the mountain were separated from one another. Representative specimens were taken from all parts of the mountain, of which thin sections are in course of preparation. Three analyses of the main or representative types are now being made by Mr. M. F. Connor. I must acknowledge with warmest thanks, the valuable help received from Mr. H. A. Honeyman, M.A., Knowlton, in the latter part of the field-work.

Composition of mountain.

The mountain consists of two principal rock masses of different ages of intrusion, with a smaller area of distinct character and probably also of different age. The earliest is a dark-gray rock weathering dull brown. In texture it is coarsely holocrystalline and frequently has a porphyritic structure. Felspar, hornblende and biotite are the principal constituents that can be distinguished in the hand specimen. In general aspect it resembles the theralite of Mount Royal in places, and in others the essexite of Shefford mountain. Flow structure is sometimes found. This rock forms the south-western part of the mountain from the vicinity of the Iron Hill Cemetery to a distance of half a mile north of Gale pond. It skirts Brome pond on the south-west. A mass which is apparently separate runs from Colliers hill for a mile and a-half towards Shefford station. Probably a part of the same original occurrence, it is either cut apart by the irruption of later rock, or covered in the intrusion of the latter. The contacts are so far concealed as to make it difficult to determine which has been the case.

Second variety of igneous rock.

The second variety of igneous rock forms the northern part of Gale mountain, Oak Hill, the vicinity of Hayes' quarry, Spruce mountain, Pine mountain and Tibbetts hill. It is a fawn coloured or light-gray rock, in texture very coarsely crystalline. Felspar, and a small amount of a green bisilicate are the chief constituents of the rock. In places, however, nepheline can be seen by the unaided eye. A single microscopic section from the farm of Nelson Keet and near the head of Brome pond shows the felspar to be microperthite and the bicilicate algerine-augite. Both are embedded in nepheline, which is here scarcely perceptible without the aid of the microscope. Pegmatitic structure is common in this rock while certain parts are porphyritic. It has been

used in the construction of the Canadian Pacific railway bridge over the Yamaska river near Sheffington, and also of the Roman Catholic church at West Shefford. In those parts of the mountain which have easy railway access it should eventually prove a valuable material for ornamental and constructive purposes. Its close resemblance to the laurvikite of Norway, which is much used for interior decorations on the continent of Europe, is important. The favourable railway communication of this locality, together with the various kinds of rocks suitable for ornamental purposes in Shefford and Brome, should give rise to a 'granite' industry at West Shefford, comparable to that of Quincy, Massachusetts, or Barre, Vermont. Some of the pegmatitic phases might be found useful for the production of felspar for pottery manufacture. Where protected from glaciation, this rock has commonly disintegrated to a depth of several feet and the weathered material, being generally somewhat uniform in size and always angular in form, makes excellent road metal. Large quantities are thus available at many points, a fact of which the Good Roads Association of the township of Brome would do well to avail itself. The name 'Iron Hill' does not appear to find justification in the presence of any considerable quantity of that metal. The name has probably been derived from the limonite coatings common on the joint planes of the syenite of the vicinity.

Probable economic value of granite.

The third rock type occurs on the road between West Shefford village and Brome pond, and is in part on the farm of John Jones. It extends for a quarter of a mile east of the road and, by greater resistance to erosion, forms a low and rather flat-topped hill. It is a greenish-gray rock and porphyritic in structure, the phenocrysts being probably felspar. The rock has the general appearance of a tinguaite, but its identification is as yet by no means definite, as no detailed study of it has yet been made. Its relation to the other igneous rocks is not clear, as the contact is concealed in all cases as far as could be found, either by drift or, in larger measure, by sedimentary outliers, which have been protected from removal by the greater durability of the rock already mentioned. Completely surrounded by the syenitic rock just described, this tinguaitic rock differs from the latter in being of an effusive, or hyperbyssal, rather than of a plutonic character. While it may be a more rapidly cooled part of the larger mass, it seems more probable that it forms a separate intrusion.

Third rock type.

Although the character of its crystallization might be regarded as indicative of the extension from an active volcano, of which this point would have been the vent, the presence of sedimentary outliers in many parts of the mountain and even at higher levels, as on Pine mountain, seem to indicate unmistakably that Brome mountain, like Shefford, is an uncovered laccolith and has never been an active volcano.

Brome mountain never an active volcano.

Geological Exploration of Anticosti.

(The Very Revd. Professor Laflamme.)

(Translated from the French.)

Work by Rev. Prof. Laflamme.

The geological study accomplished at Anticosti during the past summer extends from English Head to the north as far as Pavilion river to the south-west, that is, it covers a distance of slightly over 100 miles. All the observations here recorded, therefore, only apply to that part of the shore. The remainder will be taken up later in another report, if circumstances permit. As to the geological study of the interior, that is to say, going up the rivers and making sections, I had to give it up this year owing to the clouds of mosquitoes which swarm in that part of the country even at the end of August, and which render any continuous work very difficult. This could better be undertaken in September and October, towards the end of the season.

Stratigraphy of the island.

General stratigraphy.—This is to be found described in a very detailed form in Mr. Richardson's report for 1856 and in the geology of Canada for 1863. The very full and detailed sections which are there given should not, however, be taken too literally. The composition of the different strata of any one group, their attitudes and thicknesses, vary to such an extent at different places, that unless work is done at the exact spots where they were determined by the geologist of 1856, notably dissimilar results and conclusions would be arrived at.

It is true that the main divisions are such as they were then determined to be, but we had to give up going into a superabundance of secondary details of too numerous subdivisions. To generalize in too absolute a fashion would be laying one's self open to errors.

All the beds of the island from one side to the other lie conformably to each other, almost horizontally except for a very slight dip, hardly noticeable, towards the south or south-west, but sufficient to account for the difference in appearance between the north shore and the south shore of the island.

Abrupt cliffs.

The rocks on the north side form quite abrupt cliffs, which rise in places to more than 500 feet; those on the south shore are low lying, rising but little above the level of the St. Lawrence, except in a few cases, owing to local faulting.

Nowhere have I noticed folds or bends of any importance, except the very low anticlines revealed by sections along the shore above the Jupiter and Lachute rivers.

Two important faults.

However, two rather important faults occur in that part of the shore which I examined. One is seen at Cap-à-l'aigle (Ellis bay) and extends parallel to the shore at a certain distance from it beyond Rivière-aux-Canards. On the north side this line of fault is disclosed by an abrupt cliff, and on the south side by a string of small lakes fonnd at its foot. At the latter point the shore has been formed by the action of the waves depositing the débris torn from the partly covered beds. The second fault is found at Jupiter river. It crosses the shore obliquely one mile above its mouth at the western extremity of Cape Jupiter. From that point it crosses Jupiter bay and disappears on the shore of the West Point. The southern wall is lower than at Cap-à-l'aigle ; it sinks under water and the waves have hollowed out Jupiter bay from the northern wall, which rises into a cliff. At this place the northern cliff rises to a height of some 200 feet.

This faulting was not accompanied by any changes in the regular disposition of the beds. The strata remained horizontal on both sides of the break.

Hudson River limestones.

All the strata seen on the island are limestone, with the exception of some thin and irregular layers of sandstone at Pointe aux Graines, Riviere aux Canards, and Riviere Becsies. The Hudson River beds themselves, which form the whole northern shore from West point as far as Bay aux Renards are also limestones, but the latter are more argillaceous than those on the southern side. Imbedded in these are large corals impregnated with petroleum to such an extent that on breaking them the oil oozes out. The presence of these petroliferous fossils might lead one to hope that this valuable liquid may sometime be found in quantity on Anticosti island, but this is not very probable. The corals referred to are only met with in the Hudson River beds along the north shore. No physical disturbance has affected these strata, which are everywhere horizontal, and there are no reasons for the belief that crevices or cavities exist in them to act as reservoirs in which the petroleum, scattered throughout the mass, would in time have collected. Moreover, these corals are not abundant and the calcareous beds which contain them do not present the bituminous character found in other places, as for example in the vicinity of Quebec city or at Lake St. John.

Glacial phenomena.

The rocks of Anticosti are very often exposed on the tops of hills. In the lower parts they are concealed by a greater or less thickness

of gravel and calcareous detritus of modern origin. At different places are found varying thicknesses of stratified clay, with fossils similar to those found in post-glacial clays in other parts of the province. Their surface is covered by a layer of siliceous sand, also stratified, but devoid of fossils. These argillaceous beds cover a part of the western side of the island, where they are put under cultivation. They also appear very distinctly as river terraces at Cap Ste. Marie, and also from Rivière du Cap as far as Rivière Pavilion. Unfortunately these argillaceous deposits are not likely to extend very far into the interior, except at Lake Plantain and vicinity. Moreover, at a short distance from the shore, they are covered by a thick layer of mould which would render their availability as farming land very problamatical. Nowhere are these quaternay deposits as thick as in the great central plain of the province of Quebec.

As a rule the rivers of Anticosti have completely removed these argillaceous deposits and have eroded them to the rock over which they flow, and this in spite of the restricted volume of water which they discharge, so that their erosive power is comparatively small.

Clays of post-glacial origin.

These clays are post-glacial. The fossils which I found contained in them, and of which I have sent you specimens, amply prove this. The numerous pebbles which they contain are all calcareous, with sharp angular edges and are almost all derived from the rocks of the island. Moreover, the eminently calcareous character of the clays themselves is a proof that they are the result of the decomposition of the strata found on the island, that they were formed almost entirely 'in situ' and that the rocks on the north shore had very little or nothing to do with their origin. Therefore all the farming soil of Anticosti seems to me to be of local origin. The great scarcity of siliceous sands may thus be accounted for, the formation of the island containing very few beds of sandstone and no other siliceous rocks.

Glacial striæ scarce.

The glacial striæ are very scarce on the island, owing to the calcareous nature of the rocks, which weather easily. I found, however, a few very distinct ones at Rivière du Cap, which had been protected by a bench of sandy clay some twenty feet in thickness. Their direction is from north-east to south-west.

Moreover, evidences of glacial action are very apparent on studying the pebbles and boulders which are found in every part of the island, even on the highest points. These pebbles are everywhere numerous, some of good size and rather well rounded. They consist of fragments of gneisses, granites, pure labradorite, and other rocks, which evidently come from the north. These pebbles together with the evidence af-

forded by the glacial striæ already referred to, constitute an undeniable proof of the passage of the ancient land ice over the surface of the island.

That the waters of the subsequent period (Champlain) covered the island of Anticosti is amply proved by the presence of the fossiliferous terraces of arenaceous clay, as well as by numerous calcareous pebbles with marks of burrowing by *Saxicava*, etc., which are also found everywhere on the island, both in depressions and on eminences.

Uplifting distinctly marked.

The uplifting which characterized the close of this period throughout the province is distinctly marked on the island. Two phases of it may be recognized; they are clearly shown by two systems of terraces which are noticeable at two different levels between the St. Marie and Jupiter rivers. One of these is found at a height of about fifteen feet and the other at some thirty feet above the level of the St. Lawrence. This uplifting is still going on, and appears to be taking place with remarkable rapidity. This is proved by the deposits of gravel which form the subsoil of a great part of the island between Ste. Claire Bay and Strawberry cove, as well as the apparent filling up of Ellis bay.

The gravel is of contemporaneous origin, as benches of it are in course of formation on the rock beaches along the shore (on the 'reef,' as it is called on the island), wherever the combined action of the wind and currents favours it. I believe it is shown beyond doubt that the deposits of the Champlain period had not invaded a certain number of the bays, these being filled in later by the debris derived from the different beds and moved about by the action of the waves.

Ellis bay filling up.

Ellis bay is distinctly being filled up. Lake St. George, situated on the north-east, has just been connected with it by an artificial waterway. These two were formerly connected underground, the lake forming originally a sort of lateral extension of the bay, the uplifting of the surface which took place later separating them. At the bottom of the bay, near the dwelling place of the famous smuggler Gamache, there was, within the memory of man, a small harbour where large row-boats could take shelter. This no longer exists, the harbour being almost completely dried up.

Rock beaches extending.

The keeper of the western lighthouse (Mr. Malouin) states that the rock beaches, which are uncovered for more than a mile at low tide, appear to extend further out from the shore every year, as if, as he expresses it, the water of the St. Lawrence was slowly receding year after year.

I have seen almost everywhere, from Bay Ste. Clair to Otter river, shore deposits at levels much above those now reached by the highest

tides. At Grain point these deposits extend over an area of several acres. Their surfaces are covered by long wave marks which are all parallel to the shore line. Similar marks are found at several places on the island at short distances from the shore, and hunters who have lost their way in the bush refer to them to get their bearings, experience having shown that by walking at right angles to these marks they will eventually reach the shore. All these facts tend to show that at least the north-west part of the island is even now undergoing a movement of uplifting, and this at a comparatively rapid rate. This elevation goes on to such an extent that in my opinion it will have to be taken into account when it becomes necessary to determine the harbours and sheltering places on the coast.

Island covered with peat.

It may be stated that the whole of the island is covered with peat, which is always very coarse on the surface. This peat is composed of a mass of vegetable debris barely decomposed, in which the organic structure remains quite visible. At Ellis bay, however, a bed of black peat occurs much older than the surface deposits. It is found under a layer of clay and gravel over ten feet in thickness.

Trees of fair size.

The peat of Anticosti, when mixed with a small proportion of clay or of marl, constitutes a wonderfully fertile soil, in which vegetables and cereals can be grown to perfection. The trees also attain good dimensions but in places where the peat lies immediately over the gravel or on bed-rock, it constitutes too thin a soil and the trees do not, in such places, attain their full development, but remain dense and small. Still wherever a layer of peat, a couple of feet in thickness, rests directly on a marly or clayey subsoil, the trees are found of normal size.

Peat-bogs, proper, abound on the island. It may be said that they occupy the whole surface from East point as far as Salt lake. It has not been possible for me, owing to the short time available, to determine the exact extent or value. It can, however, be asserted that the aggregate of these areas is enormous and the deposits may be said to be inexhaustible.

Small lakes numerous.

Lakes are numerous on the island but none are of any great size. All, or nearly all, have the bottom covered by a thick layer of white calcareous marl, containing great quantities of fresh-water shells. But the chemical action of the aquatic plants is one of the principal agencies in its formation, and the material is evidently derived originally from the calcareous beds of which the island is composed. This is distinctly shown by the studies and experiments of Dr. Schmidt, physician at Bay Ste. Claire, the results of which were published in 'Le Naturaliste Canadien' of December, 1900.

This marl may be seen in places all along the shores. It is very easily recognized at a distance owing to its clear white colour, which contrasts strongly with the dark tints of the underlying beds of limestone and of the overlying peat. Wherever it is present wild plants and flowers grow exceedingly well and attain much larger dimensions. This feature is specially noticeable between Grain point and Duck river. Marl.

From what has just been said, it may be gathered that the soil of Anticosti is very variable from the farming standpoint. The peat or humus which almost everywhere constitutes the surface, forms a very fertile soil, the quality of which should not decrease or become exhausted when it overlies a clayey subsoil. But wherever it rests upon solid rock or gravel deposits it may be expected that farming will become more and more difficult, unless great quantities of fertilizers are used. Soil variable.

Economic Minerals.—Besides the coarse limestone which can be used almost everywhere for the production of lime, large quantities of a pink crystalline limestone are found between the South-west point and Pavilion which probably would take a fine polish and could be used as an ornamental stone. This limestone abounds in crinoid stems which are completely mineralized of a reddish tint, darker than the background, and would present a very pleasing appearance when polished. Of course the economic value of these deposits cannot be definitely ascertained without some preliminary work, with the view of testing the lower beds to see whether the quality of the stone improves in depth. Economic minerals.

Other crystalline limestones are found to occur in the vicinity of South-west point ; these are bluish-grey in colour and would make very good building stone. Moreover, I was told that beds of sandstone occurred on the south-east shore of the island, which could be used for the same purpose. Crystalline limestone.

On the Galiote, at about one mile from the river shore, my assistant found large deposits of pyrite. Pyrite is also found in thin sheets in the limestone beds which extend along the shore at the 'Jumpers,' about four miles below the South-west point lighthouse. Deposits of pyrite.

No trace of limonite or galena was found. The rocks of the island do not contain enough iron to warrant the hope of ever finding deposits of limonite.

Forests and Timber.—As a rule the trees on the island of Anticosti do not attain as large a size as they do in the more southerly and westerly parts of the province of Quebec. Along the shores, owing to the influence of the violent winds which blow towards the interior, the trees are almost everywhere stunted, with the branches bent and Timber.

entangled, and so thick that it is often very difficult to make any headway through them. In the interior of the island the trees are not so close together and are better developed. Certain areas may be considered as timber lands, though it is doubtful if large quantities of timber can be obtained. But wood which can be used for the manufacture of pulp is present in great quantities.

The following species have been recognized : *Abies balsamea, Betula papyracea, Larix Americana, Alnus rubra, Viburnum opulus, Abies alba, Abies nigra, Populus tremuloides, Sorbus Americana, Thuya occidentalis, Corylus rostrata* and several species of willows. Explorers who went into the interior of the island during the autumn season state that the trees found there are of much larger size. Besides the above kinds, they report the presence of *Pinus strobus* and *Fraxinus Americana.*

Second growth of trees.

In 1884 or 1885 a bush fire swept over a part of the north shore of the island. The trees which were then destroyed have been replaced by poplar and birch.

As to herbaceous plants, I hope to be able to send you a list of these later on. Dr. Schmidt, already mentioned, who devotes a great deal of attention to botany, has begun a herbarium composed exclusively of the plants of the island. His collection already numbers several hundred specimens, and he has very kindly promised me a list of the plants obtained, which list I shall forward to you.

Fur bearing animals.

There are very few species of land mammals on the island. The following are the only ones met with : black bear, red, black and silver fox, otter, marten and a very small rodent. Mr. Menier, the owner of the island, has gone to a great deal of expense in importing and placing on Anticosti, moose, cariboo, Virginia deer, beaver and even buffalo, in the hope of acclimatizing them and enriching the island with game. But the experiment is as yet of too recent date to be able to judge of the ultimate results.

I cannot conclude this brief report without acknowledging the kindness with which I was greeted by the proprietor of the island and his head employees. They were ever willing to give their help with the utmost readiness. Mr. Commettant, governor of the island for Mr. Menier, Abbé Tremblay and Dr. Schmidt in particular were a great help to me. Dr. Schmidt kindly added to my collection of fossils several species which I had been unable to obtain and which he had found in the course of his excursions. I am glad to have an opportunity to publicly offer them my most sincere thanks.

New Brunswick.

Professor L. W. Bailey.

Work by Prof. L. W. Bailey.

I have the honour to submit the following Summary Report of geological explorations made by me during the past summer in the Province of New Brunswick.

In a similar report submitted the previous year, it was announced that in connection with the study of certain Silurian rocks, reported by Mr. W. J. Wilson, of the Survey Staff, in the Parish of Canterbury, York county, where previously only Cambro-Silurian strata were supposed to exist, fossiliferous strata containing graptolites of Upper Cambrian age had been found by the writer in the valley of Eel River, near Benton, Carleton county. One of the objects of insvetigation in the season just closed, was, by your direction, the separation of the Cambrian and Silurian rocks in the district referred to, and the determination of the limits of each.

Section reviewed.

For the purpose named, I made a very careful review of the section afforded by the St. John river between Woodstock and the great central granite range of York county, as well as of the country lying to the westward of this stream as far as the International boundary. In the prosecution of this work I was, for a few days, accompanied by Dr. G. F. Matthew, of St. John, and to his intimate knowledge of the Cambrian system, in all its various aspects, as well as its contained organisms, I am indebted for very valuable assistance, as I am also for the benefit of his great skill in the solving of different stratigraphical problems.

Letter from Dr. Matthew.

The following letter, addressed to me by Dr. Matthew, well expresses the nature of the problems referred to, as well as some of the directions in which their solution was sought.

St. John, N.B., October 8, 1901.

' Prof. L. W. Bailey.

Dear Sir,—Having visited with you some of the more important sections of the Cambrian and Silurian rocks in York county, I would offer the following suggestions bearing on the possible structure and age of the early Palæozoic sediments in that part of the province. These remarks are made chiefly in paralleling the strata of the district

above referred to with the known Silurian and Cambrian rocks of the southern counties of New Brunswick.

Synclinal structure in northern York County and Carleton County.

'*The Border of Carleton and York Counties.*—It appears to me that the structure of the strata in this district is related to two synclinal folds, the axes of which diverge at a considerable angle from Monument Settlement on the western border of the province. One of these runs about N.N.E., mostly west of the provincial boundary line in the State of Maine, but crosses into New Brunswick northwest of Woodstock. The other proceeds east from Monument Settlement crossing the St. John at or near the mouth of Eel River.

Cambrian slates of southern Carleton Co.

'*Cambrian.*—'North of the axis of the syncline last named the strata appear to be Cambrian. At Benton and extending east and west from that village, there is a belt of black and dark grey slates which would correspond to the Bretonian division of the St. John group in the nature of its sediments. In this belt, at Benton, you have discovered a *Dictyonema* which I cannot distinguish from *D. flabelliforme*, Eichwald, a well-known fossil of the Upper Cambrian. There are here also obscure remains of trilobites, of which one appeared to be the pygidium of an *Agnostus*, and another a pleura with a shape and groove like that of *Parabolina* and its allies.

'North of these dark shales and extending as far north as Woodstock, is a large body of gray slates and quartzites that, in texture and appearance of the beds, may be compared with the Johannian division of the St. John group. Like that division of the Cambrian of the southern counties also, it contains burrows of *Monocraterion.* Other pits observed on the surface of the layers were those of *Arenicolites.* Such burrows, however, might be found in strata of later date than the Cambrian.

Ordovician fossils of Beccaguimic river.

'That this belt of rock is Cambrian seems to be shown also by the occurrence of Lower Ordovician fossils in it on the Beccaguimic river, north-east of Woodstock. These fossils are in the highest beds just where they pass beneath the Upper Silurian slates. The fossils of this band, therefore, have a relation to the quartzites beneath, similar to that held by the Arenig fauna in the St. John basin, relative to the underlying Cambrian portion of the St. John group.

'In both areas the Ordivician fauna occupies only a narrow belt at the summit of the terrane, the great bulk of which is Cambrian. It would be impossible to show on a map of even moderate scale the Ordovician portion of the terrane in either of these areas; and, therefore, it seems to the writer desirable that the Ordovician coloration

should be removed from this portion of the geological map and Cambrian substituted.

'Two types of eruptives appear in this region; one consisting of agglomerates and ash-rocks along the syncline that runs east and west in the valley of Eel river, and which also show in Monument Settlement, near Dinnen's Mill. The other type is associated with granitoid grits and gray levigated ash-rocks. Rocks of this character were noted at a number of points between the quartzite slate series and the black slates, but inclnded in the former. These rocks are seen on the St. John river at Woodstock, and at Oak Mountain and Dinnen's Mill in Monument Settlement; as well as further south and east in Canterbury. Eruptive rocks of southern Carleton Co.

'These granitoid grits are found on both sides of a lenticular area in which Silurian fossils have been found between Benton and Canterbury, and they are succeeded to the south by quartzites which appear to be on the reverse side of a basin of which the Woodstock Cambrian quartzites form the north side. Next these to the south are the granites which traverse the central part of York county. Granitoid grits.

Silurian.—The discovery of Silurian fossils in the basin above referred to, by yourself and Mr. W. J. Wilson of the Survey staff, show that all the strata in this district cannot be Cambrian. Silurian fossils.

'Within the area enclosed or bordered by granitoid grits there are slate conglomerates which lie outside of the localities where the Silurian fossils are found. These may form the limiting beds of a basin of Silurian rocks bordered by the granitoid grits, slates and quartzites of the Cambrian. This view implies that the black slates (Bretonian) of the Cambrian have been removed by denudation on the south side of the Cambrian basin and are there covered by the Silurian.

'The fossils found in this basin are brachiopods of Silurian type and some obscure corals. The course of this basin of Silurian rocks is nearly parallel to that of the Cambrian, and its axis lies to the south of the axis of the Cambrian basin. Fossils.

'*Intrusive Syenite.*—A band of intrusive syenite which runs nearly parallel to the western syncline of the Cambrian rocks has affected their condition in Benton and its vicinity, throwing them into close folds parallel to the direction of the syenitic ridge, and causing a very marked squeezing together of the black slates, so that the hydrosomes of the Dictyonemas are shortened in one direction and lengthened in the other. The rods of the hydrosomes that lie transverse to the line of pressure are nearly twice as far apart as those that are parallel to Syenite.

it, and the colonies of these animals might be thought to consist of two species, if it were not observed that the width of the bars is always governed by the direction in which the colony lies on the slab of slate.

Upper silurian graptolites near Fredericton.

'*The East Central Part of York County.*—Another belt of slates and quartzites which crosses York county and which has heretofore been thought to be of Cambrian or Ordovician age has yielded you graphites which it appears to me must belong to the genus *Monograptus.* This discovery of Silurian graptolites within a few miles of Fredericton has received further support from the finding of two species of *Monograptus* in shales several miles further to the north-west. This, coupled with the discovery many years ago of Silurian fossils on the Nashwaak, might be supposed to indicate that the whole of this belt of slates may be referred to the Silurian, as the strata are very uniform over large areas.

Silurian rocks.

'*General Comparisons.*—One should bear in mind that there are two important divisions in the Silurian terrane of southern New Brunswick. The older of these is to be correlated with the Clinton and Medina groups of the New York system. In most places it consists of black and dark grey slates and grey quartzites and flags. These are the 'dark argillites' of the Survey Report of 1875-76. To this division belong the slates and quartzites with graptolites described above.

Silurian of Rocky Brook.

'The distribution of these slates in York county appears to indicate that the overlying division may rest unconformably upon it, else we should find the upper division infolded with it. This may be the case at Rocky brook, on the Nashwaak, where fossils of the summit of the Silurian have been found. With the exception of this area on Rocky brook, the upper division of the Silurian has not been recognized in this area in the centre of York county.

Pale argillites.

'The pale argillites of the Survey Report of 1875, &c., form the upper part of the Silurian system in this region. They are found north and west of Woodstock, in Carleton county, and on the other hand are to be seen in a belt along the south side of the central Carboniferous area of Central New Brunswick. This division would include strata of Niagara and Upper Helderberg age. It is more calcareous than the Lower Devonian, and fossils are found in it in a number of localities, and then of such a kind that the Silurian age of the rock has usually been easily recognized.

'Compared with the Silurian series of Passamaquoddy bay at the Mascarene shore (see Report of 1874-75), the pale argillites would correlate with divisions 3, 4 and 5. Of these, division 3, according to

Dr. Ami, contains a Niagara fauna. The dark argillites would compare with divisions 1 and 2, and to this portion of the system, as above remarked, the graptolite beds of York county should belong.

'In conclusion, let me say that any light I may have been able to throw on the age of these rocks is due to your excellent judgment in taking me to such localities as would yield important data for correlation.

'I am, yours sincerely,

'G. F. Matthew.'

Previous opinions confirmed.

The above conclusions of Dr. Matthew, so far as they relate to the rocks of northern York and of Carleton county are in the main similar to those already reached by myself, and in part stated in previous reports. While, however, the general structure, within the region examined, may be regarded as fairly well ascertained, the details of distribution, owing partly to the disturbed and altered condition of the rocks and partly to their concealment by forest and drift, present many difficulties. It is proposed that these shall be made the subject of a special report now in course of preparation.

Silurian graptolites near Fredericton.

The discovery of Silurian fossils *(Monograptus)* in the quartzite slate band south of the granite was made by me during the past summer on Murray's brook, seven miles west of Fredericton. Subsequently, in my company, Dr. Matthew found similar forms on the right bank of the St. John river, in Central Kingsclear, five or six miles distant from the locality first named. From the uniformity of the beds between these points and over all the area to the westward as far as the international boundary, we believe that all are of one system, and that the tract, coloured on existing maps as Cambro-Silurian, must be assigned to the Silurian system. The same will be true of much of the region east of the St. John river in the southern portion of the parishes of Queensbury and Bright; but, inasmuch as along the valley of the Keswick river they pass beneath the rocks of the Coal formation, of which the border here bends far to the north, we are unable as yet to connect them directly with the rocks of the Nashwaak valley. With the exception of the fossiliferous strata found on Rocky brook and referred to above, the rocks of this valley, as seen at Stanley, as well as those of Tay creek, McLean's brook, Ryan's brook, the Taxes and the S. W. Miramichi, are more highly altered and may be of greater age.

Work with Mr. H. S. Poole.

Another work assigned to me for the past summer was the revision, in connection with Mr. H. S. Poole, of the Carboniferous rocks of New

Brunswick, a subject in which public interest has recently been awakened, partly as the result of private enterprise, but mainly on account of the efforts of the New Brunswick government to promote the development of the coal fields at Grand lake, Queen's county.

Considering the nearly horizontal attitude of the coal rocks in the great central Carboniferous basin, and the fact that the observations of many years had failed to reveal the existence of other than small seams near the surface, the all-important question appeared to be the determination of what part of the entire Carboniferous system these surface rocks represent; that is to say, whether they are the equivalents of the Mill-stone Grit formation, as contended by some geologists, or of this formation with a portion of the middle or productive measures, as thought by others, or finally, whether they appertain to the Newer or Permo-Carboniferous period. While the first view would seem to preclude the possibility or at least probability of any considerable seams being found, the second and last would favour, though by no means establish, such conclusion.

Comparison with Carboniferous rocks of Nova Scotia valuable.

In attempting to arrive at any definite opinion upon this subject, it is evident that a comparison of the Carboniferous rocks of New Brunswick with those of Nova Scotia, where this system is so well represented and has been so thoroughly exploited, should be of the greatest possible value. With this object in view, a joint survey of the field was undertaken by Mr. Poole and myself, at the request of the Director, my knowledge of localities in New Brunswick enabling me to point out, without loss of time, such places as would be likely to afford valuable information, while Mr. Poole's long and intimate acquaintance with the coal districts of the sister province, made it possible for him to institute the desired comparisons. All parts of the coal field were visited by us together, but, as constituting the connecting link between the Carboniferous areas of the province, special attention was paid to the districts about Moncton, Sackville, Dorchester and the Albert county coast.

Proposed reports on the area.

The general results of the comparisons referred to are embodied in the Summary Report of Mr. Poole, accompanying this; while a more elaborate and joint report, reviewing the whole subject of the Carboniferous system in New Brunswick, will be submitted as soon as it is prepared. In the latter, all the facts bearing on the occurrence of coal in the province, as derived from the topography of the district, evidences of erosion, surface exposures, stratigraphy, mining operations and boreholes, will be considered at length, and recommendations will be offered as to future practical work.

ECONOMIC MINERALS.

Coal.—The railroad connecting the coal mines at Grand Lake with Fredericton is in course of construction, and when completed next summer, is expected to lead to a much more vigorous working of the mines than has heretofore been attempted. The railway company is asked by the government of New Brunswick, in return for a subsidy, to supply a plant capable of producing 500 tons of coal a day, or 150,000 tons per year. It remains, however, to be seen, whether, under the conditions existing at Grand lake, such a production can actually be maintained. With a yield of 2,000 tons to the acre, 500 tons would involve the removal of coal from one-fourth of an acre per day, or from one acre every four days, which, with an average soil-capping of 12 feet, would mean a large amount of unprofitable work, while in the case of operations wholly beneath the surface, the necessity of the removal of sufficient rock to allow room to the workmen would again be a serious drawback. It cannot, however, be doubted that the output of these mines, especially with the present high price of coal, might be materially increased. Operations in the Grand Lake coal basin.

More or less work has been done in the Dunsinane coal field during the past summer, but only of an exploratory character. No important developments have been made. Work at Dunsinane coal mine.

At Coal Branch, in Kent county, a shaft has been sunk in the vicinity of the coal seams previously reported there, and where operations were believed to indicate the existence of a three-foot seam of coal at a depth of 44 feet. The drill used, however, being a churn-drill, could not give very accurate results, and those obtained by shafting have not yet been reported.

Petroleum.—Petroleum was discovered in Westmoreland county over thirty years ago, and its occurrence there may prove to be of importance. For the following statement of work done in searching for oil in this county I am indebted to Mr. Harold B. Goodrich, the geologist in charge for the owners, and it is given entirely on his authority. According to Mr. Goodrich: 'After a summer's field work in New Brunswick, well No. 1 was located at Upper Dover, Westmoreland county (on S. A. Steeve's farm) in September 1899. It was driven to a depth of 1,340 feet. The geologic column was:— Petroleum.

Boring No. 1. Upper Dover.

	Feet.
Middle Carboniferous (sandstone, &c.)	110
Lower Carboniferous (conglomerate, marl, &c.)	200
Albert shale formation	720
Probably older rocks	310
	1,340

'The two upper formations were nearly flat, but, as usual, the underlying Albert shales were found to be intensely folded and possibly faulted, so that the measure of their actual thickness is by no means correctly given in the column. We struck much gas at various horizons and two sands that were well fitted to contain oil, but were dry. The hole was abandoned in May, 1900. This first boring was a test to determine the condition of the Albert shale-oil beds under a cover of the younger rocks.

Boring No. 2. St. Joseph's college Memramcook.

'In May, 1900, the rig was removed to St. Joseph's college and well No. 2 was put down to a depth of 1,040 feet. There was much gas, and at 365–370 feet an oil sand and flow of oil was struck. Several accidents made it impossible to take advantage of this oil and the well was sunk further. At 670 feet, salt water was found. The drilling was entirely in the Albert shale series, which for the last 200 feet was mainly close-grained sandstone with shale bands.

Boring No. 3.

'No. 3 was begun one mile north of the college on February 27, 1901. The drilling was through hard and soft layers of Albert shale. A poor record was kept, and it is possible that a slight flow of oil or gas may have escaped the drillers attention. No petroleum is shown by the record, although the shales were highly bituminous. At 555 feet the well was abandoned owing to quicksands. The last ten feet was in red sandy marl or conglomerate.

Boring No. 4, oil found.

'Well No. 4 was commenced in May, 1901, at a point 400 feet north of No. 2 at the college. The total depth was 408 feet. At 176 to 204 feet there were twenty-three feet of oil-bearing sandstone. This was not recognized at the time, so boring was continued. Later the hole was filled up to this depth; it was torpedoed and a pumping apparatus was placed. While it has not been pumped continuously to date, there has been a considerable product which shows no sign of decreasing. The oil is of excellent quality.

Boring No. 5.

'Well No. 5 was located, on August 5, 1901, 200 feet S.W. of No. 4. The geologic section is practically the same as the latter; bituminous calcareous shales, with small hard limestone beds. At 174–178 feet there was a sandstone with considerable gas. At 247–275 feet is an oil-bearing sand (the same thickness as that of No. 4). No attempt was made to pump this well, but instead it was plugged and now awaits further development in the field.

Boring No. 6.

'The last week in August, No. 6 was located 100 yards N. by. W. of No. 4. Up to date we have reached 226 feet and are still sinking. In that distance we have passed through three separate flows of gas.

Almost the entire section is bituminous black shale. The present indications for a producer are excellent.

'In well No. 7, which was located on September 11, about 200 yards north of No. 4, we are now down about 340 feet. The section was similar to that of No. 6. At about 190 feet we struck gas, which was later cased off. At 326 feet there was a flow of petroleum, probably from fissures in the shale. We decided to bore still further, hoping for an increase in the quantity of oil. However, as the well is in excellent condition we can at any time use the present supply.' Boring No. 7, oil found.

The above wells were visited by the writer on the 5th of July, at which time, with a $2\frac{1}{2}$ inch pump, worked by steam, the yield was four barrels for a period of six hours, or at a rate of from eight to ten barrels per day. The oil was a heavy, dark-green lubricating oil, well adapted as a machinery oil, and estimated as having a value of about $7.50 per barrel. Its specific gravity at 60° Fahr. is 0·860, while that of the American crude oil varies from 0·79 to 0·88. No analysis has yet reached me, but it is thought by those in charge that it will probably yield at least 30 per cent of burning oil, 15 per cent of lubricating oil and 10 per cent of solid paraffine. Yield of oil.

Copper.—While in Westmoreland county, a visit was made to the works of the Intercolonial Copper Company near Dorchester. The conditions of the occurrence of ore at this point have been given in earlier reports. The ore is of low grade, not averaging over $3\frac{1}{2}$ per cent of copper, but is widely disseminated through the mass of the rock, from which, it is thought, that by the employment of new and improved processes it can be profitably extracted. For this purpose a large and expensive plant has been introduced, but at the time of our visit it had not yet been brought into operation. It is proposed to crush the entire rock, consisting of grey conglomerate and sandstone, more or less mixed with coaly matter and containing the ore, mainly chalcocite, in veins and scattered nodules, and, after roasting and treatment with acids, to separate the copper by electrical action. As copper ores of a like character and with similar associations are known to occur elsewhere in the province, as on the Nepinquit river, near Bathurst, the results of the operations at Dorchester will be awaited with interest. Copper mines near Dorchester.

At Chester, in Albert county, an opening was being made in a very hard ash-like rock of Huronian age, through which was disseminated small strings of chalcocite, associated with more or less green malachite. It adds another to the many localities in this great pre-Cambrian belt in which copper ores have been observed, but is less promising Copper deposit at Chester,

than those of Alma and Point Wolfe, further west. No well defined lode was exposed.

Borings in the nickel deposits near St. Stephen.

Nickel.—The Government drill has been in operation in connection with the nickel deposits near St. Stephen, but without satisfactory results as yet. The extreme hardness of the rock, a crystalline diorite with disseminated pyrrhotite, makes progress extremely slow and expensive, while no important increase in the percentage of nickel has yet been found to warrant the outlay.

Molybdenite has been reported from the vicinity of the S. W. Miramichi, and good specimens have been shown to me, but I have been unable as yet to obtain any particulars as to quantity.

The Coal Problem in New Brunswick.

Professor H. S. Poole, Dalhousie College, Halifax.

Coal in New Brunswick.

Rocks of the Carboniferous system cover a very large area in New Brunswick, although but little workable coal has yet been found among them. It was hoped that in the extensive region in the north-eastern part of the province, in which these rocks had not been exhaustively explored, better coal seams than any yet known in that district, or near Grand lake, might be discovered at the surface, or that by carefully working out the geological structure, some place might be pointed out where borings for coal might be made with a good prospect of success. Professor H. S. Poole of Dalhousie College, Halifax, was requested to undertake this work. He had previously made a study of the coal measures of Nova Scotia, including Cape Breton, while Inspector of Mines for that province, and also while actively engaged in the practical working of some of its collieries.

Investigations by Prof. Henry S. Poole.

He reports as follows:—'I considered the problem of discovering coal from a commercial standpoint, as though I were engaged by a corporation, prepared to explore and follow up any indications that held out even the least prospect of success towards the establishing of permanent coal-mining operations. Two months were spent in making a general reconnaissance of the Carboniferous system in New Brunswick and studying the relation of its strata to the rocks underlying the same system in Nova Scotia and to their assumed equivalent in that province, visiting many of the known exposures of coal seams, regardless of size, and keeping in mind my experience elsewhere of seams variable in thickness and coal measures hidden under formations

of later deposition. In this inquiry I allowed myself to generalize more freely than would be justified if one were engaged in a detailed survey of the actual exposures, and as yet, in possession only of superficial information. The benefit of any doubt was given to the inquiry.

Area of Carboniferous rocks.

For convenience of description, the area occupied by the rocks of the Carboniferous may be divided into two districts by a line running through the older rocks of Indian mountain some six miles to the northward of Moncton, and paralleling the Intercolonial railway between St. John and Moncton. Such a line traverses Lower Carboniferous rocks, except between the mountain and the Straits of Northumberland, where newer measures overlap. North of the line the Carboniferous beds lie practically flat and unbroken. To the south, they are more inclined and disturbed, appearing on the confines of Nova Scotia as continuations of members of the Joggins section.

The people of New Brunswick are so keenly alive to the value of workable seams and the streams of the province have been so thoroughly traversed by lumbermen, that it may be accepted that no seam of workable thickness crops to the surface and has been overlooked. This being assumed, it follows that success from further search can be hoped for only where experience or theory may suggest examination being made under the superficial deposits or by boring into the more deeply seated strata.

Renewed interest in known coal seams.

Of the known coal seams, nothing specially new has to be reported. They have been described in late reports by Dr. Ells and Prof. Bailey. There has, however, been renewed interest in explorations at Dunsinane and Coal Branch, and a beginning has been made in the sinking of a slope at the former and a vertical shaft at the latter place.

Throughout the northern district, nothing was noted that indicated a possible presence of thick coal seams either near the surface or in depth—nothing to hold out hope that measures rich in bituminous deposits might be discovered by systematic search. The only discovery that seemed possible would be that of a thickening of the thin seams in those parts of the country that are as yet unexposed.

Coal pebbles.

At Indiantown, coal pebbles with water-worn fragments of fine shale appear in some sandstone beds and they have been apparently derived from an underlying seam not at present known. A somewhat similar occurrence of coal pebbles has been noted to the east of Dunsinane.

The southern part of the Carboniferous district, with its thick sections and its unconformities, possesses possibilities of finding workable coal on closer examination. It appears that certain beds on the New

Brunswick side of the Bay of Fundy are continuations of some of those in the Joggins section which have a definite relation to the coal-bearing series of Cumberland county, and they entered through Cape Maringuoin, Grindstone Island and Mary's Point to New Horton, where they curve rapidly and run down the coast at an increased angle of dip to Cape Enrage. With them would curve the overlying Joggins seams, outcropping under the waters of Shepody Bay.

To the north-eastward, the structure is not so clear. The Millstone grit series folds over, dips to the north-west and is unconformably covered by Permo-Carboniferous strata where the dip again reverses. So decided an unconformity suggests that the equivalents of the Joggins coal measures may possibly be repeated in that direction under newer formations extending to Northumberland Strait and up the coast.

Assistance.

During part of my time I had the benefit of Prof. Bailey's company, experience and local knowledge. I am also indebted for information and assistance to many persons interested in developing the resources of the province, chief among whom are Lieut.-Governor McLellan, Hon. A. T. Dunn, Mr. F. Black, Mr. P. S. Archibald, Mr. J. White, Mr. W. Ogden, Capt. Bacon and Mr. H. C. Read.

Prince Edward Island.

Mr. Lawrence W. Watson.

Work by Mr. Lawrence W. Watson.

Acting upon the instructions contained in your letter of the 17th June last, I have, since receiving the same, prosecuted the work therein outlined at every possible opportunity. The conditions under which the work was undertaken naturally differed in a considerable degree from those governing the members of your permanent staff or those persons employed for a time upon investigations for your Department to the exclusion of all other work. This consideration, and the fact that much data for an exhaustive report upon several parts of the inquiry committed to me could not be procured without an expenditure (needless because not demanded by any existing urgency) which might be avoided, without detriment to the ultimate result desired, by waiting for and taking advantage of favourable opportunities for visiting distant localities without much attendant expense, make it imperative that the present report be a preliminary one, to be supplemented later by one in fuller detail.

Geological value of work.

In no particular of the investigations undertaken is the necessity of these considerations more emphasized than in the endeavour to solve the problems of our geological formations, for the solution of which, much patient search has to be made for fossils, by no means abundant in our strata. I have visited many localities and spent much time in collecting the fossils which have been forwarded to you. Much work must still be done before the question of the exact positions of our rocks in the geological scale can be satisfactorily settled. The geology of St. Peter's Island has not been studied as much as it deserved to be, owing to its difficulty of access. I hope, however, to be able later, to report upon this locality which is comparatively rich in organic remains.

Underlying coal areas possible.

Investigations so far made do not warrant any change in the opinion that coal areas may underlie the Post-Carboniferous rocks of certain districts at a depth not too great for mining. As the depth of the superincumbent strata may be less than anticipated, and as the coal measures with their wealth of coal may be nearer the surface than is generally supposed, and as the cost of boring is less than formerly, it seems desirable that in view of possible success, such operations should be undertaken in these districts.

No minerals found.

No minerals of any importance have been found. I collected some nodules of copper ore on Governor's island, but did not find indications of any considerable deposit. I have not been able to find any evidence that gold occurs in this province to any greater extent than the very limited one of 'colours' in the sand of the sea-shore.

Peat bogs.

In the department of Surface Geology a few words may be said about recent deposits. Peat bogs, of small individual extent, but covering in the aggregate a considerable area, are found in many places, the quality of the deposits and their depth varying greatly. Some of them have been visited, but consideration of these will best be reserved until a comparative statement can be prepared showing their extent and the results of analysis of the peat. This subject suggests economic possibilities of too great importance to this province to be disposed of without fuller investigation than the time allowed for this inquiry and report permitted.

Beds of 'mussel mud' are frequent in our bays and inlets. Formed of accumulations of shells of oysters and mussels, decayed animal matter and alluvium, they constitute a valuable fertilizer, much used by our farmers. It is pleasing to record a late regulation, which prohibits digging the mud where it is covered by beds of living oysters. I shall take advantage of the approaching season of digging to submit samples of this product to you.

Sand dunes.

In view of the fact that our coast-line is very generally being worn away at a comparatively alarming rate, the formation of sand dunes on our northern and eastern coasts is interesting and important. While these are of comparatively slow formation, the whole contour of one of these sand-hills may be changed in one storm, and entrance into harbours may be shifted or occluded. I observe that the sand dunes upon which vegetation grows, change least, and that the sand is arrested by any such object as a fallen tree, and thereby protected from displacement by powerful winds. Most beneficial results would, therefore, follow if fences of spruce and similar trees were placed in parallel lines along the sand tracts.

I have devoted much time to the study of the flora and have collected some hundreds of plants. As soon as time permits, I will, if desired, give a complete list of all the species of our flora hitherto authentically identified.

Collections made.

Collections of mollusca, algae, reptilia, batrachia and the smaller mammals have been made and forwarded to your Department. I visited and made collections from Indian shell heaps, finding therein ornaments or implements of stone and fragments from the manufacture of the last mentioned, all of which have been already forwarded.

The foregoing is an outline of the work done. It may be supplemented later by a report in more detail containing lists of fossils and of our fauna and flora, together with further notes upon the various subjects you suggested for study and investigation.

Kings and Hants Counties, Nova Scotia.

Mr. Hugh Fletcher.

Work by Mr. H. Fletcher.

The winter of 1900-01 was spent by Mr. Fletcher in compiling plans and sections from surveys made in the field by himself and his assistants during the previous summer, as detailed in the Summary Report for 1900, pages 162 to 166.

Coal seams examined.

He left Ottawa on June 18, for Sydney, Cape Breton, to examine borings and explorations made among coal seams of the Millstone Grit, near Grand lake and Cochran lake. The Tracy seam near the Moseley pits south of Cochran lake, was proved to be six feet thick, but to have not more than three feet and a half of coal in one clean layer, three small partings breaking up the rest of the coal. The seam, where opened, some miles farther west, yielded three feet and a half of good coal.

GEOLOGICAL SKETCH MAP

OF PARTS OF

KINGS & HANTS COUNTIES, N.S.

To accompany Summary Report by

HUGH FLETCHER, B.A.

1901

SCALE = 2 MILES TO ONE INCH.

Geological Legend

- Triassic.
- Carboniferous Limestone.
- Devonian. (Horton)
- Silurian (& Cambro Silurian ?)
- Lower Cambrian (Graphitic Slate Series)
- Igneous { Granite / Triassic Trap

Extension of the Mullins seam bored for.

On Grand Lake road at the bridge over South-west brook, a hole, bored in the hope of cutting a workable extension of the Mullins or Carroll seam, passed through 750 feet of gray sandstone with only a few thin layers of shale and coal. Subsequently a hole was bored to this seam at the outlet of Lynk lake, near the outcrops mentioned in the Summary Report for 1895, where it was found to be only three feet thick. In no case was more than one workable seam found.

Principal field of investigations.

The greater part of the season, however, was spent on the south side of Minas Basin, in the counties of Kings and Hants, in the district lying between the Avon river on the east and the Salmon-tail river, Gaspereau lake, and Coldbrook on the west, bounded on the north by the shore from Falmouth to Ira Woodworth bay, and extending south into the granite country at the head of the west branch of Avon river. Mr. M. H. McLeod was again Mr. Fletcher's assistant, and he had also with him Messrs. A. T. McKinnon and Wm. L. Lodge. He is greatly indebted to Professors A. E. Coldwell and Ernest Haycock, of Wolfville, to Professor Kennedy of Windsor and many others for assistance.

District historically interesting.

Though this district is more noted for its early history, the picturesque beauty of its shores, waterfalls, lakes and woods, the richness of its meadows, and productiveness of its farms and orchards than for its mines, yet rock-formations of great interest attract tourists and students to the country every year, to study its geology, and carry away specimens of the amethyst, agate, jasper, chalcedony, zeolites, magnetite, copper and other curious crystals and aggregations from its traps, the beautiful selenite and fibrous gypsum from its Triassic marls, and ripple-marks, rain-prints, fish-remains and other fossils from its more indurated sediments.

Relics of Indian inhabitants.

Remains of the villages of the Micmac Indians, their landing-places, trails, and burying-grounds,are still traceable at Starrs Point, Canard, Gaspereau and other places. Heaps of shells and bones of various animals attest the former abundance of game and fish. They are associated with implements and arrow-heads of a primitive civilization, chipped out of stone obtained from Blomidon or fashioned from pieces of native copper from Cape d'Or.

The Acadians.

The ancestors of the Acadians, who displaced the Micmacs, to be dispossessed in turn by the British, came from a country of marshes on the west coast of France, where the sea was kept out by artificial means. They found around the Bay of Fundy, in Nova Scotia and New Brunswick, similar marshes underlaid by finely pulverized, friable red mud, brought in by the tides, into which the roots push themselves for several feet; and turning to account their skill and experience, they

built many miles of dyke, at first enclosing small areas alongside the upland, next, by concerted, skilful effort, building across the rivers from point to point, with a sluice or *aboiteau* in the channels to let out the fresh water and keep the salt water from flooding the marshes and killing the vegetation. By this means they reclaimed and brought under cultivation thousands of acres of excellent meadow-land, which has retained its extraordinary fertility for one hundred and fifty years, and still produces grain, vegetables and fruit, yielding two to three tons of timothy to the acre when well drained, turned over and seeded down once in every five or ten years, and is sometimes so valuable as to be rated at $400 per acre.

Marsh lands reclaimed.

One of the largest of these marsh lands is Grand Pré, in Kings county, celebrated in verse as the home of Longfellow's Evangeline, and situated between the beautiful valleys of the Gaspereau and Cornwallis rivers, up which the phenomenal tides of the Bay of Fundy run for several miles to form, at high water, inlets navigable for small craft. Near it are the willows and apple-trees of the early French farmers, a well and the ruins of their church and houses.

The home of Evangeline.

Other dyke-protected meadows occur at the mouths of the Avon, Canard, Habitant and Pereau rivers, of historic interest in the struggle for supremacy in the New World between the English and French, during the seventeenth and eighteenth centuries. They are bordered by sloping fields and undulating uplands, while away to the northward Blomidon rises to a height of 500 feet, crowned with evergreens and hardwood, opposing to the turbulent tides a perpendicular wall of basaltic trap, jutting out past the fringe of bright red sandstone that forms the cliffs to Pereau and Kingsport. Cape Blomidon is the eastern buttress of the north mountain range, which, extending thence to Brier Island, shuts out the fog of the Bay of Fundy from the Annapolis valley. Another elevation of great scenic interest in this vicinity is the 'Look Off,' three miles from Canning, from which an extensive view is presented of the surrounding country, with fine orchards laden with apples, plums, pears, cherries and small fruits, gardens and grazing lands for cattle and sheep; and deep valleys, lakes and woods, dimly seen to the southward, full of trout and salmon, moose, bears, partridges and other game. Many such fine views and imposing and attractive pieces of scenery are easily accessible from the railway. Among these are the valleys of the Gaspereau and Coldbrook, the Deep Hollow, Whiterock, Black River falls, Moores falls, the beaches and sea cliffs, particularly between Kingsport and Blomidon.

Cape Blomidon.

Places attractive for scenic beauty.

The dyke lands have been described by many writers.*

Geology of Kings county

Kings county affords a great variety of geological formations. Those of sedimentary origin belong to the following periods: Pleistocene, Triassic, Carboniferous, Devonian (Horton), Silurian (perhaps including Cambro-Silurian or Upper Cambrian), Lower Cambrian (upper gold-bearing series). Igneous or Plutonic rocks are also present in hill-masses and dykes. Following the Triassic came a great effusion of trap. All the rocks to the top of the Silurian are affected by an intrusion of the gray granite that forms so important a feature on the Atlantic coast; and are also cut by dykes of gray diorite. These intrusions appear, however, to differ in age and material from that which has formed the Cobequid hills and altered the strata of Riversdale and Harrington river.

Notwithstanding all that has been written† in a general description of these formations, much still remains to be done to define on a map their precise boundaries and relations.

Drift material.

Drift material from the North mountain is found as far south as Etna (Greenfield) and other points on the South mountain. Pebbles and boulders from the Cobequid hills also abound in the boulder-clay of all the sea cliffs, valleys and beaches. Professor Coldwell has described south-easterly glacial striæ on rocks of the ridge immediately south of Wolfville; an old beach-formation parallel to the present water frontage at the same place; and trunks, stumps and roots of trees *in situ*, about thirty feet below high-water mark on the northern side of Long island, representing, he argues, a subsidence of the land of forty to fifty feet. An interesting deposit of shell-marl, used as a fertilizer, has been dug from a bog on the land of Mr. William Wallace at Canaan. Bog iron and manganese have been worked to a small extent south of Coldbrook station, at Canaan and other localities.

Bog iron and manganese.

Description of Triassic belt.

The southern limit of the Triassic runs westward from Avonport and follows a short distance south of the Cornwallis river. The belt, which has an average width of six miles and a half, is bounded on the north by the North mountain, the uppermost beds being those cut by the trap. It contains, near Kingsport, friable sandstone, for the most

*Herbin's 'Marshlands' and 'Grand Pré'; Haliburton's 'Sam Slick' and 'History of Nova Scotia'; Longfellow's 'Evangeline'; Macleod's 'Notary of Grand Pré'; Theodore Rand's Poems; Gesner's 'Geology and Industrial Resources of Nova Scotia'; Dawson's 'Acadian Geology'; and others.

†Report by Jackson and Alger; Gesner's 'Geology of Nova Scotia' and 'Industrial Resources'; Dawson's 'Acadian Geology'; Papers by Professors Coldwell and Haycock and by Dr. Honeyman in the 'Transactions of the Nova Scotian Institute of Science'; and others.

part brick or Indian-red, with great irregular layers or patches of conglomerate; overlaid, towards Pereau, by finer marly beds, which extend to Blomidon and include layers of selenite, nine inches and downward, in the upper portion. A narrow outlier is found in the large brook above Kentville, separated from the main basin. Sections of these rocks have been measured wherever accessible. Their total thickness is not great. They are spread over this large tract in almost horizontal layers, and it has been suggested that underlying formations might be reached by boreholes.

Carboniferous limestone.

From a point half a mile above the West Branch, the Avon river flows through a basin of red and gray marls, flags and sandstones, gypsum and limestone of the Carboniferous limestone formation. In the neighbourhood of the plaster and limestone quarries of St. Croix, Windsor, Falmouth, Mount Dennison and Hantsport this basin is of great extent; but it enters Kings county only in a narrow zone along the shore from Hantsport to Blue Beach.

Horton series.

A somewhat irregular belt of more metamorphosed rocks is met with in the West Branch of Avon river, the Mill Branch, Halfway and Gaspereau rivers. These, as they occur at Horton Bluff, have been called the Horton series.* Sections have been made there and on the Curry and other brooks flowing into Gaspereau river, to define their thickness, which is probably not less than on the north side of Minas Basin. The base is well defined at Gaspereau, Halfway river and other places; from it the 'Wickwire sandstone' is largely quarried for foundations of buildings; and it yields also the quarry sandstone of Halfway river.

Controversy as to true position of Horton series.

A brief reference may here be made to a controversy that has arisen among palæophytologists concerning the true position of this series.† Some of them, while correlating the Horton with the rocks of Riversdale and Harrington river, in Colchester county, have classified it as above the Devonian of New Brunswick; others regarding the Riversdale and the Devonian of New Brunswick as identical, would place the Horton beneath them. In the region now under examination, the Horton rests upon no rocks younger than Silurian, and comes from beneath the Carboniferous limestone, 'the old Lower Carboniferous, or Keokuk-St. Louis,' according to Schuchert, and is clearly, therefore, neither Upper Carboniferous nor Millstone Grit. 'Surely,' an eminent palæobotanist remarks, 'the coefficient of error should not be so

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* Acadian Geology, pages 252—257.

†'A Backward Step in Palæobotany,' by Dr. G. F. Matthew, in Trans. Roy. Soc. Can. for 1901; Can. Record of Sc., Jan. and July, 1901; Ottawa Naturalist, May and July, 1901.

great as to permit an entire geological period to intervene between its palæontologically theoretical position and its actual place.'

Marine fossils found in underlying series.

The rocks next underlying contain, between Canaan and Gaspereau lake, Silurian marine fossils.* West of New Minas, the fossil, *Dictyonema Websteri*, is obtained from a series apparently distinct, resembling the so-called Cambro-Silurian of Antigonish and Pictou counties, but referred by Dawson to the Silurian, by Honeyman to the Lower Silurian, and by Coldwell to the Cambrian. The stratigraphical relations have not yet been thoroughly worked out. From the former are quarried the impure limestones of Gaspereau lake and Canaan ; from the latter, the flinty, quartzose flags of Highbury.

Graphitic slates of Lower Cambrian age.

Graphitic slates of the age of the Lower Cambrian or Upper Gold-bearing series, sometimes so black as to be worked for graphite, are largely developed in the Halfway, Black and Gaspereau rivers. They are cut by small veins of quartz, some of which have been exploited but do not seem to be persistent or to carry gold. Just below a bridge about three miles above the mouth of Black river, an east-and-west anticline brings to the surface beds of whin ; but it is not known that gold-bearing veins have been discovered along its axis.

Rock series cut by diorite dykes.

This series, as well as the preceding, is everywhere intersected by dykes of light-gray dioritic rock and cut off to the southward by a great mass of granite, which stretches nearly to the Atlantic, a blackish granular diorite generally occupying a narrow zone at the contact. The diorites and the granite are all, however, older than the Horton rocks, the latter containing fragments of both. The granite is usually gray, but in Black and Little rivers it is in part red. Both varieties make durable ornamental and building stones. Where Triassic rocks are broken through by the trap of the North mountain the alteration of their soft sediments does not extend to many feet from the contact.

Characteristic minerals.

Vuggs, both in the latter and in the trap, are filled with crystalline aggregations varying in size from mere druses to several inches in diameter, and veins and plates contain many other minerals already described as characteristic of the traps of the Bay of Fundy at Cape Blomidon and many of the small coves from Scotts bay westward—the amethyst and black quartz, agate and jasper being especially prized by collectors. A list of the varieties to be obtained at different points is given in Dr. Hoffmann's 'Annotated List of Canadian Minerals.'†

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* Acadian Geology, pages 562 to 573, 594.

†Cf. also ' Acadian Geology '; Gesner's 'Geol. of N. S. '; Jackson and Alger ; Herbin's ' Grand Pré'.

Columnar, granular or crystalline, basaltic trap occupies a narrow chain along the contact with the Trias from near the 'Look Off' to Cape Blomidon, thence on the outer shore to Cape Split. The shores from Scott's bay westward to Baxter harbour and the greater part of the trap area inland are, on the contrary, occupied by sheets of amygdaloid, dipping north-westward at a very low angle.

Veins of magnetite are found at Blomidon, as at Gerrish mountain and other places, of less than workable size. Native copper and malachite are also present, but apparently in much less quantity than at Cape d'Or, in Cumberland county, where the Colonial Copper company is spending large sums of money in search of a paying deposit.

Borings near Leamington.

Fifty six hand-drill borings, ranging in depth from 10 to 82 feet, have been made near Leamington, in Cumberland county, to trace the course of the coal seams overlying the large beds worked in the Springhill coal field, and the relation of these latter to small seams of the Upper Maccan river. These explorations were not undertaken, as has been already stated, for the discovery of workable coal seams at the surface, the outcrop of those of the Springhill mines having turned to the eastward and become concealed among faults at the bottom of the basin near Rodney; but to determine the lines along which the lower levels in the working of these seams must pass by the outcrops of small seams overlying them at stated distances. It is also desirable to ascertain whether the conglomerate upon the slope of the Cobequid hills south of Leamington and westward towards Apple river, instead of being Lower Carboniferous, may not rather represent higher measures, just as the 1,500 feet belt near the Chignecto and Styles mines is, according to Barlow and McOuat, a local replacement of the fine sediments that on the Joggins section immediately underlie or include some of the coal seams.

Assistance given.

For kind assistance in this work Mr. Fletcher has again to thank Mr. J. R. Cowans, of the Cumberland Railway and Coal Company, the gentlemen mentioned on page 162 of last year's Summary Report and George C. Harrison, C.E., of Southampton.

Nova Scotia Gold Fields.

Mr. E. R. Faribault.

Office work by Mr. E. R. Faribault.

Mr. E. R. Faribault returned to Ottawa on August 26, 1900, from the Paris International Exhibition, where he had been sent to superintend the installation of the Canadian mineral exhibit; and after three

weeks field-work in the gold-fields of eastern Nova Scotia, he reached Ottawa again on September 28 to resume his office work, on which he reports as follows :—

'The last three months of 1900 were spent in the office preparing a report on the collection of Canadian minerals sent to the Paris Exhibition * and attending to correspondence and other duties in connection with the exhibit. I also prepared a plan to be used for the installation of that mineral exhibit in the space allotted to it at the Glasgow International Exhibition of 1901.

'The winter months of 1901 were devoted to the compilation of the large scale plans of the gold-mining districts of Waverley and Tangier in the county of Halifax, both of which were handed in for publication before leaving for the field. Some progress was made also in the compilation of the surveys made several years ago for the Lawrencetown and Preston map-sheets, lying immediately east of Halifax Harbour, and in this work I was assisted from May 1 by Mr. Owen O'Sullivan.'

Field work.

On the field-work accomplished in Nova Scotia during the past season, Mr. Faribault reports as follows :—

In accordance with your instructions, I left Ottawa on June 15 for Nova Scotia, to resume the surveys interrupted last year, in connection with the mapping and study of the structural geology of the gold-bearing rocks of that province.

Mr. Owen O'Sullivan also left for Nova Scotia on June 15, and from that date until his return to Ottawa on October 4 he was engaged with the exception of three weeks occupied in surveying with Mr. C. O. Senécal, in continuing, under my supervision, the much delayed compilation of the topographical surveys of the region lying immediately east of Halifax Harbour and the line of the Intercolonial railway.

Assistants.

I was again ably assisted in the field, during the whole season, by Messrs. Archibald Cameron and Jas. McG. Cruickshank, who have been my assistants for sixteen and fourteen summers, respectively. They joined me at Halifax on June 18, and, after a few days spent revising surveys to the east and west of Halifax, they were engaged surveying the region passed over in 1896 and covered by the St. Margaret's Bay sheet, No. 71 and the Aspotogan sheet, No. 70. This region covers 240 square miles of land, includes the numerous lakes and streams flowing southward into St. Margaret's bay, and the East river of Chester, flowing into Chester basin, and it extends inland to the

* Summary Report Geol. Surv. Can., 1900, pp. 16 to 37.

north and west to the old Annapolis road and the Windsor-Chester road. The shore roads were surveyed with the odometer, and several of the lumbering roads of the interior were chained to be used as tie-lines; while the streams, lakes and other traverses were measured by pacing and the prismatic compass.'

With the exception of a few small outliers of Carboniferous limestone along the coast, the whole of the district surveyed is underlaid by granite, is very rough, with rugged rocky hills or huge boulders of granite strewn over the surface, and is of but little economical importance. The country is mostly barren along the coast, but well wooded with good timber some distance in the interior. It is unfit for agriculture and uninhabited, except along the sea-shore, where a prosperous scattered population is engaged in fishing and lumbering.

Messrs. Cameron and Cruickshank were engaged in the field until the 28th of October, when they began the plotting of their surveys.

Acknowledgments.

In the performance of my field-work, I have received much information and assistance from miners and other persons, and I wish to thank especially the Hon. C. E. Church, ex-Commissioner of Mines; Hon. A. Drysdale, Commissioner of Mines; Dr. Edwin Gilpin, Inspector of Mines; Hon. S. H. Holmes, and Messrs. Roderick McColl, D. Weatherbe, F. H. Mason, N. W. Keddy, Geo. E. Francklyn, T. N. Baker, J. H. Austen, and Sidney Y. Bauld, of Halifax; A. F. Church and J. B. Morrell, Bedford; Geo. W. Stuart, Truro; A. A. Hayward, Waverley; G. J. Partington, Isaacs Harbour; John H. Anderson and Mark Anthony, Musquodoboit Harbour; John J. Withrow, South Uniacke; Capt. C. D. Lordly, Alex. M. Church and Principal Lawson, Chester; John A. Wheeler, Irving Croft, D. C. Butterfield, Amos A. Hiseler, H. B. Bigney, Charles Mills, D. M. Fraser, and John Croft, Jr., Chester Basin.

Nature of work.

My own work in the field was confined principally to a closer study of the geological structure of the gold-mining districts of Montague and Lake Catcha, in the county of Halifax, surveyed in 1898, and briefly reported on in the Summary Report for that year, and the gold-mining districts of South Uniacke, situated partly in Halifax and partly in Hants county, surveyed in 1899, and also reported on in the Summary Report for that year. The structure of the anticlinal folds, the location of the auriferous quartz veins and the numerous faults affecting them were carefully made out, and the results added to the plans of these districts previously plotted on the scale of 250 feet to one inch. These plans are ready for publication, and that of Montague is now in the hands of the engraver.

A special detailed survey was also made of the gold district of Gold river, in the county of Lunenburg, and a plan plotted on the scale of 250 feet to one inch has been completed.

A revision was also made of the geological structure of the region lying to the north of Chester basin, between the East river of Chester, Gold river, and Chester Grant, surveyed in 1895, for the general mapping of the country, on the scale of one mile to an inch.

Some preliminary notes on the structure of the Gold River gold district will no doubt be appreciated by those interested in it.

Gold River gold district.

Gold River Gold-mining District.—This district is situated on the Gold river, in the county of Lunenburg, one mile above the bridge spanning the stream on the shore-road, where it discharges into Chester basin. It is five miles north of the town of Chester, twelve miles east of Mahone bay, a station on the Central railway, and fifty miles west of Halifax, by the shore road.

First discovery of gold.

There is a tradition that gold was originally found on the river by early French settlers, and hence its name. Another authority asserts that the name was originally 'Gould river'. The first discovery of gold of which we have positive information was made by Messrs. Daniel Dimock and David Whitford, on June 20, 1861. Mr. Henry Poole visited Gold river in 1861, and in his report to the Government said: "One quartz vein was fifteen inches wide, and had thick beds of quartzite rock above it, and several feet of thin laminated slates below, and the vein bore N. 60° W. and dipped 38° north." This description agrees with a quartz vein opened on the north-east bank of the river and shown to me as the first vein opened in the district.

Area of the district.

The mining operations have all, to this date, been prosecuted on the north-eastern side of the river, but important surface developments have also been made on the south-western side. In the district gold-bearing veins have been discovered over an area 7,000 feet long and 4,000 feet wide. A detailed survey has been made of this area, and a plan plotted on the scale of 250 feet to one inch.

Geological structure.

Great difficulty was experienced in working out the geological structure of the district. No mining operation was being carried out when the survey was made and most of the old workings were full of water and inaccessible. The surface is heavily covered with glacial drift or decomposed rock and natural rock-exposures are very scarce. Were it not for the good sections available along the deep valley of the Gold river, and the informations gathered from the miners who have worked from time to time in the several mines, it would have been impossible to make out the structure of the measures.

Interbedded veins.

All the auriferous quartz veins discovered in the district belong to the interbedded class of fissure veins. They follow the planes of sedimentation of belts of slates interstratified between heavy beds of quartzites and they occur along the truncated dome of a huge anti-

Horizon.

clinal fold. The horizon of the strata brought up by this upheaval is estimated to be 6,600 feet below the base of the group of slates which form the upper division of the Acadian gold-bearing rocks, giving a total erosion of some 17,000 feet of known sedimentary rocks.

Anticlinal fold.

The general course of the anticline is north-east and south-west. At the western limit of the district, a six-inch lead, opened in a slate belt by Mr. N. W. Keddy, on area 1076, block 1, curves westerly around the crown of the anticline and pitches 37° west. The anticline is well exposed on Gold river at the Hemlock fall, where it pitches 15° south-westerly. At the eastern extremity of the district, on area 314, block 3, a five-inch lead discovered by Mr. Charles Mills in a wide slate belt just north of the Gammon group of leads, has been found to curve in a south-easterly direction around the crest of the anticline and dip 30° east.

On the south side of the anticline the strata curve abruptly and dip southerly at high angles, increasing rapidly and reaching 85° at a distance of 2,000 feet to the south of the anticline. On the north limb the strata dip at much lower angles, and vary from 35° near the

Dome.

axis to 45° at a distance of 1,700 feet north of the axis. The axis-plane of the fold dips thus to the north at an angle of 65°, and the upheaval has the form of a much elongated, elliptical dome whose centre is not far east of the bridge spanning the East Branch.

Veins on the south limb of anticline.

All the most important veins operated in the district are situated on the south limb of the anticline. The tilted-up strata of the south limb have necessarily been subjected to more shearing and fissuring in the process of the upheaval than the less disturbed ones of the north limb, and as a result they were more favourable to the formation of large auriferous quartz veins. So far, 32 leads have been discovered within a width of 2,300 feet of strata on the south side of the anticline, and of these 17 have been developed or worked to some extent. The present surface developments show that the veins are very persistent along their course from one end of the district to the other, and that they must also extend to very great depth.

Gammon group of saddle-reefs.

The district has not yet been prospected sufficiently to determine with any certainty the zones of special enrichment. The Gammon group of leads, opened immediately south of the anticline, at the east end of the district, is very promising as a low grade ore deposit.

Within a distance of 170 feet the group shows seven large quartz veins, dipping vertically, giving a total thickness of 70 feet of crushing material, and holding several bands of well mineralized ore. It is probable that this extensive development of quartz in the leads leads is confined to a relatively small portion of the crown immediately south of the anticline. The size of the veins will probably be found to diminish in depth, but, if the developments are carried in the direction of the axis-plane of the fold, which dips 65° north, a succession of large superposed veins will probably be discovered going to great depths. More development work should be done towards the west along this part of the anticline.

Minor fold.

An important crumple of the strata has been observed in a shaft sunk by Mr. T. N. Baker 500 feet south of the Gammon leads, on the intersection of the Baker fissure vein, running north-west and south-east, with the Vermilion lead, which follows the stratification. The foot-wall of the Vermilion lead is crumpled here into a small anticlinal, which runs N. 76° E., dips 31° E., and is followed 40 feet north by a small synclinal fold, beyond which the rocks assume their general course towards the north-east. The streak of rich ore found here is undoubtedly caused by this crumpling, and it is probable that similar enrichments will be found on the leads affected by this crumpling to the north and south of the Vermilion lead. Very rich drift has been found along a depression to the south-east, and it probably comes from the intersection of the Captain and the Picayune leads with either this crumpling or the Baker fissure vein.

Leads worked on the south dip.

The leads which have been worked on the south side of the anticline, are met with in the following order from north to south :—The Jumbo lead, worked to a depth of 80 feet; the Vermilion lead, 40 feet; the Captain lead, worked by several shafts at the Victor mine to depths of 200 feet, and at the Lincoln mine to depths of 119 and 250 feet; the Picayune, 200 and 211 feet; the Mill lead, 100 feet; the Fox lead, 70 feet; the Brisco lead, 40 feet; the Hiseler, 50 feet; the Croft Hill lead, 40 feet, and the Iron lead, 40 feet.

As far as can be ascertained from the present developments, the leads which are most promising on the south dip are the Gammon, Jumbo, Vermilion, Captain, Picayune, Mill and Fox leads. The only lead worked to any extent on the north dip is the North Star lead, situated at a distance of 1,500 feet to the north of the anticline. A rich streak or roll, dipping west at a low angle, has been worked 600 feet in length and 100 feet in depth on this lead. The intervening section between the North Star lead and the anticline has not

North Star lead.

yet been much prospected. It is probable, however, that the ground immediately north of the Gammon leads and the anticline contains some valuable leads.

North-west bulge.

On the north-west side of the anticlinal fold the strata curve gently in a south-westerly direction towards the main anticline and form a broad bulge favourable to the formation of quartz veins. The rock section exposed along the Gold river, from Innes and Big Cumberland pools to the head of Mosher's fall, presents some eighteen interbedded veins situated on this bulge. Some have been tested and found auriferous, but none have been prospected to any extent.

Touquoy gold drift.

It is said that the richest drift discovered in the district was found on the old Touquoy property, at the south-west end of the district. Much prospecting has been done for many years back by Mr. Damas Touquoy and others to find the lead, but the surface is covered with glacial drift to a depth of twenty to twenty-five feet and the float of gold quartz is only found at the top of the drift and has possibly drifted a long distance. It is very probable, however, that the lead will be found on the above described bulge and possibly at no great distance from the anticline. More prospecting should be done along the anticline, between the Keddy lead and the Croucher lead, and beyond it as far as the Hemlock fall on the river.

Faults.

The structure of the anticlinal fold has been subjected to much disturbance since the folding and the deposition of the interbedded quartz veins. Unfortunately, the rock exposures are too few and the developments accomplished are as yet too limited to determine with any certainty the many faults affecting the district. Several of them run transversely across the anticlinal fold. A left-hand fault has been observed to give a displacement of seventy-five feet on the North Star lead, and running a little east of south along the west side of a swamp, it crosses the river at Big Cumberland pool and passes west of the Hemlock fall, where the anticline appears to have been shoved 200 or 300 feet, to the north of the Croucher lead. An important left-hand fault appears to have displaced the rocks along the Eastern branch, but its direction could not be ascertained. A left-hand fault, giving a shove of some twenty feet on the Croft Hill leads, runs up the river, passes east of the Jumbo crusher and eighty feet east of the eighty-foot shaft on the Jumbo lead. A few small faults have also been encountered in the workings of the Captain lead at the east end of the district. There is also probably a left-hand fault of 100 feet or more west of Baker's workings on the North Star lead, and possibly also to the east of them.

Several falls, cascades and rapids are met with along the course of Gold river through the district, and a few of these have already been utilized, in a small way, as water-power for the mines. An excellent water-power could be established at Little or Big Cumberland pool, where 75 or 100 feet of a head could be had with little cost from the Mosher's falls. With such a power in the middle of the district, there is not the least doubt that many of the large belts of low-grade ore, overlooked to the present day, could be worked at a good profit, and make the district one of the best producers in the province.

Excellent water-power.

Cambrian Rocks and Fossils of Cape Breton.

Dr. George F. Matthew.

During the past season I was engaged in June with Dr. Bailey in examining the slate and quartzite rocks of the western part of York county and southern part of Carleton county, New Brunswick. Subsequently I visited, with Dr. Bailey, exposures of these rocks on the western border of the Carboniferous area in York county. The results of these examinations are given in Dr. Bailey's summary report.

For the greater part of the month of July I was working on the Cambrian rocks in Cape Breton, examining some districts not previously visited and perfecting the work in other parts of the field. The general results of my work so far as they relate to the geological structure are embodied in the comparative table submitted herewith. From this table it will be seen that almost every Cambrian fauna of English rocks of this age occurs in the Maritime provinces of Canada. In other words the Cambrian history is complete, without breaks here as in Great Britain. The table also shows the position in the Cambrian formation of certain iron ores and slate deposits, and where mineral wealth of this kind may be looked for with the best prospect of success. The upper ferriferous horizon is in that part of the formation in which the hematite beds of Bell Island, Newfoundland, are contained. The lower iron-bearing band is in the middle of the red rocks of the basal part of the Cambrian.

Work by Dr. Matthews in Cape Breton.

The most promising of the slate rocks of the Cape Breton Cambrian for economic purposes are found at the top of the basal part of the formation in the Mira river valley. They are of the same age as the argillites or clay slates that are quarried at Trinity Bay in Newfoundland. Their value will depend upon the ease of cleavage and accessibility to a market.

Promising slate rocks.

LOWER PORTION OF THE PALÆOZOIC ROCKS

Groups, and kinds of Rocks in Cape Breton.	European Writers.	Maritime Provinces	Leading Genera of the Several Groups.	English Equivalent.		
				Llandeilo.	Arrenig.	Tremadoc.
	Ordovician.	3. Bretonian Division.	e. Harpes, *Trinucleus*, in N. W. New Brunswick.			
3. Dark gray, and black carbonaceous shales often changed to slates ; a few thin seams and lentiles of dark limestone and some thin flags.	Lower Silurian.		d. Cyclognathus Parabolinella, *Tetragraptus*, Didymograptus, in S. New Brunswick.			
			c^2 *Asaphellus*, Parabollinella, Triarthrus, Bellerophon.			
	True or Eo. Cambrian.	Primordeal Cambrian.	c. *Dictyonema*, Monobolina, Schizambon, Acrotreta.		Dolgelly.	
			b. *Peltura*, Sphærophthalmus, Leptoplastus, Ctenopyge.			
			a. *Parabolina*, Agnostus, Anomocare, Orthis, in S. New Brunswick.			
2. Micaceous gray slates, flagstones and quartzites. Iron-bearing in Mira Valley, Cape Breton.		2. Johannian.	c. Agnostus, Lingulella. (Place of Olenus.)			Ffestiniog and Maenterog.

				b. *Paradoxides*, Beyrichia, Lingulepis. *a.* Obolus, Lingulella.	Menevian.	Solva.
1. Dark gray slates or shales with calcareous lentiles. Gray sandstones. Interraned conglomerates at and near the base.	True or Eo. Cambrian.		1. Acadian.	*d e.* *Paradoxides*, Solenopleura, Ptychoparia, Microdiscus. *c.* *Paradoxides*, Conocoryphe, Liostracus, Agnostus. *a-b.* *Protolenus*, Ellipsocephalus, Beyrichona, Trematobolus, in S. New Brunswick.		
3. Fine greenish gray argillites, some reddish gray. Horizon of roofing slates, in C. Breton and Newfoundland.	Sparagmite Formation, Norway.	Basal Cambrian. (Mihi.)	Etcheminian.	3. Upper.	Ptychoparia ? Ostracoda, 4 genera. *Acrotreta*, Lingulella, Obolus. Acrothyra, Hyolithes.	Caerfai.
2. Red sandstone and red and gray argillite. Lower iron-bearing horizon of Cape Breton Cambrian.				2 and 1, Lower.	*Holasaphus*, Paradoxidoid trilobite, Ostracoda, Billingsella, Lingulella, Acrothyra, Obolus, Hyolithes.	
1. Gray shale or slate, with some quartzite and conglomerate, the latter especially at the base.					Lingulella, Leptobolus, Obolus. Acrothyra, Acrotreta, Hyolithes.	
Co. Dolorites, breccias and amygdaloidal ash rocks. Some gray shales about thé middle.			Coldbrookian.		Lingulella, 2 Ostracoda. Acrothyra, Acrotreta.	Pebidian ?

Having but a short time at my disposal in Cape Breton this year, I devoted it to extending the examination in the district already explored, and to study some doubtful points which I had not been able to settle satisfactorily when previously in the island.

In the valley of the Mira river, by the discovery of the Paradoxides fauna at several points, I was better assured of the distribution of the middle members of the Cambrian system, and by exploration on St. Andrews channel, I was able to satisfy myself that strata, formerly thought to be more recent than the Cambrian, were of that age. Details in reference to these matters will appear in my fullest report.

General result of the exploration.

I may now add some statements in regard to the general result of the exploration—first, in its bearing on a scientific knowledge of the Cambrian of the Atlantic provinces, and—second, in regard to a few facts bearing on economic points. The writer may premise that previous to his first visit to the island two Cambrian faunas had been discovered there. The first, before the work of the Geological Survey of Canada was extended to the island; this was made known by the late Dr. D. Honeyman, and was the fauna of Peltura and Sphœrophthalmus-fossils which were found on McNeil brook, of the Mira river, and sent to the great exhibition in London, where they were determined by the late J. W. Salter. The second discovery was made by Mr. Hugh Fletcher, during exploration for the Canadian Geological Survey, in the valley of McLeod brook, near Barasois. These fossils were examples of Dictyonema, and were determined as being of the species *D. socialis*, Salter (= *D. flabelliforme*, Eichwald), by Prof. Chas. Lapworth.

Recognized European faunas.

Other fossils were collected in various parts of the Cambrian field by Mr. Fletcher, but they did not result in determining any known Cambrian horizon. Thus, of the five European faunas of the Cambrian-Paradoxides, Olemes Peltura, Dictyonema, and Asaphellus, only the third and fourth had been recognized. And of the faunas older than Paradoxides, the varied fauna of the Protolemus bed of New Brunswick was unrecognized, as were also the several sporadic faunas containing trilobites of the Olenellus family that had been found at a distance north, north-east and south-west of Cape Breton.

Cambrian system in Cape-Breton.

It remained then a question whether a large part of the Cambrian system was wanting in Cape Breton; or whether the older part was represented by barren measures. It is true that Mr. Fletcher, during his survey of the Cambrian district of the island, had collected small Brachiopods at several points, which had been determined by the late Mr. Billings as Obolella. But at the time of Mr. Fletcher's survey, a

number of small species of different horizons that are now placed in other genera were then included in Obolella. Hence these fossils gave no certain indication (under this name) of the part of the Cambrian system to which they belonged. The task before the present writer, was to discover if these missing faunas were present in the island, and by their means and through a knowledge of the physical aspect of such rocks as might enclose them, to work out the succession of members in the Cambrian rocks and trace their distribution in the areas where such rocks were found.

Important fossils found.

Of the faunas named above, we have not been able to recognize the Protolenus fauna, but that next above it was discovered on the Mira river, in Bengal settlement, and on Trout brook. The fossils appear to belong to *Paradoxides rugulosus*, or a closely allied species. A more important discovery was made by Mr. S. W. Loper, when collecting in this part of Cape Breton for the United States National Museum. He found a Paradoxides, which the writer ascertained to be a variety of *P. Forchhammeri*, thus indicating the presence of the upper Paradoxides fauna, not heretofore certainly recognized in America. It occurs in a part of the Cambrian, which, hitherto, neither in New Brunswick nor Cape Breton, has yielded trilobite remains.

Cambrian faunas continuous.

In explorations in the valley of McLean brook, where Mr. Fletcher had found Dictyonema, the overlying fauna of Asaphellus (Tremadoc fauna) was found. This extended the faunas in Cape Breton to the summit of the Cambrian system. There still remains a blank where the fauna with Olenus and Parabolina come in, but this is simply due to the barrenness of the measures, as the strata are continuous without any break from the Paradoxides to the Peltura fauna. Thus, so far as the typical Cambrian faunas and rocks are concerned, there is a continuous and unbroken succession in Cape Breton.

Difficulty of studying basal Cambrian rocks.

In studying the basal Cambrian rocks of this island, we are confronted with a difficulty which has been an obstacle to the investigation of this series in other fields, viz., the barrenness of large masses of these rocks and the irregularity in the distribution and the localization of the limited faunas which they contain—limited not only as regards the number of fossils usually met with, but also of the few groups of the animal kingdom represented in the various occurrences. When to this is added the imperfect preservation of the fossils, it will be seen that there are many obstacles to a full and satisfactory knowledge of these ancient faunas of the basal Cambrian.

Brachiopoda and Ostracoda on Indian brook.

After searching a number of sections of these rocks with indifferent success, we were so fortunate as to discover on some branches of Indian

brook, on East bay, sections that gave excellent results so far as the Brachiopoda and Ostracoda are concerned. Here the fossils were sufficiently numerous and well preserved to enable one to speak with some confidence as to the succession of forms in the Etcheminian, the conditions of their habitat, the currents prevailing during the entombment of the faunas, and the appearance and disappearance of certain types of animals during this long pericd.

Further, it was ascertained that there were two successive faunas in these rocks, marked by Brachiopoda and Ostracoda. If we had the trilobites we should probably have subordinate divisions of these two faunas. There is probably a third fauna in the mud-beds of the volcanic rocks beneath, which contain four or five forms different from those of the Etcheminian.

Division between Etcheminian faunas.

The line of division between the two Etcheminian faunas is at the top of the red sandstone and shales of the middle group of the Etchiminian beds. At this stage quite a number of new species appear and displace the earlier ones. Here the genus *Acrothele* comes in. Besides being common in the Upper Etcheminian, this genus continues so in the Protolenus beds and those holding Paradoxides, and is sparingly represented in the higher Cambrian.

Value of minute fossils in determining horizons.

Among special zoological features belonging to the animals of this early time that are worthy of notice the value of minute fossils stands out with some prominence. Their importance is well shown by Tullberg's Monograph on the Agnosti. But in this case it is the minute Entomostracans and Brachiopods which yield valuable characters for determining horizons. Many of the Ostracoda of the Etcheminian beds, like those of the Protolenus fauna, had visual organs, having a prominent ocular tubercle in each valve situated close to the anterior end of the hinge line; the main adductor muscle was placed close behind it. In this they differ from the common forms of the Ordovician and Silurian rocks, in which the supposed muscle mark is toward the middle of the valve. In form, as well as in structure, their nearest relatives are those of the Protolenus beds, which follow them in natural succession. Of two new types in these faunas, one (Bradorona) is abundant in the Lower Etcheminian, and is peculiar in its shovel-shaped valves; the other with smaller but proportionately longer valves is common in the Upper Etcheminian. On the whole, the Etcheminian forms of Ostracoda are large.

Mode of occurrence of Ostracoda.

A character emphasized by writers who have made the Ostracoda a subject of investigation is their social habits; they occur in swarms wherever found. Anyone would be impressed with this who has seen

a cluster of Cyprids floating shell to shell in the quiet waters of a sheltered pond, and on surfaces of the shale of the Ordovician and Silurian rocks this peculiarity of habit is strikingly shown by the closely packed layers of the shells of the Ostracoda which they sometimes contain.

Habits of Ostracods.

But it is a singular fact that the writer has seen no indication of such a habit in the Protolenian and Etcheminian Ostracods. On the contrary they are always solitary, and scattered sparingly among the shells of Brachiopoda, where these last often cover whole surfaces of layers. It is also pretty certain that they had habits of burrowing and hiding. In a bed of dead shells of Brachiopods (Protosiphon) of the Protelenian time, that had been drifted on a Cambrian shore in the Kennebecasis valley, and packed together with spaces between the valves, once-living Ostracods (Beyrichona) are found, where they had sheltered themselves with their valves tightly closed, as in life. And it is common to find them thus, or with the valves partly agape in beds where the valves of the Brachiopods are scattered. These peculiarities appear to indicate a difference of habit from the later types of Ostracoda. The Brachiopods which are so abundant on some layers of the Etcheminian sediments of Indian Brook have also yielded some facts new to science. Such small fossils as those of the genus Acrotreta are not much of a prize to the ordinary collector of fossils, for they are too small to be attractive objects in a cabinet. A few have been found and described from the Cambrian rocks. In Europe they have been referred mostly to von Seebach's species *A. socialis*; while those found in America have usually been thought to be of Billings' species *A. gemma* (this, however, is not Cambrian but Ordovician). Externally the Acrotretas are much alike, and the almost uniform ornamentation of a fine striation concentric to the umbo, leaves little room for the discrimination of species by outward characters. In form they do not vary greatly, and in size there is little change from the earliest Cambrian to the middle of the Ordovician system.

Brachiopods.

Acrotretas.

The Cape Breton beds of the Basal Cambrian, however, not only show great variation of form, but they contain a group of species so far removed from the typical Acrotretas, that it seemed necessary to institute a separate genus (Acrothyra) for them. These peculiar forms far outnumber the typical Acrotretas in the basal beds of the Cambrian, and have two well-marked species, one of which is found in the lower, and the other characterizes the upper Etcheminian fauna.

New species.

It is by their internal characters, revealed by the mould of the shell, that these minute species are most readily discriminated; so that including the two genera Acrothyra and Acrotreta, there are about

eight species of Acrotretoid Brachiopoda in place of the two or three that have been hitherto recognized.

Minute Brachiopods.

While speaking of the minute Brachiopods, one may refer to those of the genus Leptobolus—small thin shells with the lateral and central muscles far advanced toward the front, and with the vascular trunks near the margins. They thus had large visceral cavities and narrow mantle margins, both early larval characters, as may be seen by the development of *Obolus (Botsfordia) pulcher*. In both points above named they differ from typical Lingulella, which had a comparatively small visceral cavity and wide mantle borders. These little Leptoboli are found sparingly in the Lower Etcheminian, but they are quite abundant in the Upper Etcheminian beds. From this they extend up to the thin flags and shales that come beneath the Peltura fauna, being found sparingly and at intervals in the intervening measures; and they probably continue on to the typical forms in the Ordovician described by the late James Hall. No doubt several species have been described under Lingulella.

Lingulella.

Of Lingulella proper, and of Obolus, there are two species which deserve attention, because of their considerable size among the diminutive species, which in general, characterize the Etcheminian beds; and because each is found in the mud-beds of the group, the one in the Upper and the other in the Lower Etcheminian. They have been found to appear when sandstones and grits cease to be deposited, and disappear on the recurrence of coarse sediments. In the Middle Cambrian we find species which resemble these in form and size, but they are most abundant in the sandstones and flags. The Etcheminian species referred to are *Lingulella Gregwa* and *Obolus Bretonensis*, the former of the Lower and the latter of the Upper Etcheminian fauna.

Fourteen zones.

The collections on which the above observations are based, have been made from fourteen zones or beds of the Etcheminian sediment, of which eight are in the Lower and six in the Upper Etcheminian. They therefore represent a fairly continuous succession of the Inarticulate Brachiopods, and the Ostracods, of that distant period.

Continuous history.

That the zoological history of the time was so continuous in the East bay district is to be attributed to the deposition of these Cambrian sediments in a narrow sheltered sound, and to the comparatively thin mass of sediments which the group exhibits here. Their mass did not sink sufficiently deep into the earth's crust to be changed by the internal heat of the globe, nor was it covered by heavy masses of sediment of subsequent ages. They were well protected from lateral thrust and so are not much distorted. In the thicker deposits of the

Mira valley of this age, fossils, judging by our experience, are of rare occurrence.

Trilobites. Of trilobites, good examples were found at only one locality, and these of a kind not found elsewhere in the Etcheminian. The many-jointed spined pygidea of one species are most like those of Megalaspis at the base of the Ordovician, but the head-shields do not agree with that genus. These belong to the Lower Etcheminian. A few trilobite remains, like shields of Agraulos and Ptychoparia, are found at the top of the Upper Etcheminian.

The Articulate Brachiopods are represented by a Billingsella in the Lower Etcheminian, and the Hyolithida, by the two genera, Hyolithes and Orthotheca, in poorly preserved examples, occurring at intervals in these Etcheminian beds.

Other groups. Other groups found elsewhere in the Basal Cambrian, such as Gasteropods and Lamellibranchs, remain unrecognized in the Cape Breton beds of this age. This is also the case with the Archæocyathinæ. Probably the water was too heavily charged with sediment and too much agitated to allow these to flourish.

Useful minerals. As the writer's work in Cape Breton was chiefly palæontological, its value in relation to the useful minerals was chiefly in fixing horizons where these occur and so affording the means of tracing them from one district to another. Some exploration and digging for iron ore have been made on the small streams that feed Indian brook from the north. Iron ore. The ore is a red hematite, and is in fahlbands, irregularly distributed in a ferriferous red sandstone. The openings exhibited much lean ore with some of better quality. This ore is in the middle division of the Etcheminian, and therefore much older than the hematite beds at Grand Mira.

It was noticed that the Upper Etcheminian on the Mira river, in a number of places, consists of fine-grained, compact gray clay-slate. When Mr. Fletcher, in his reports, speaks of gray 'argillites,' he usually means the fine rocks of this group, though sometimes the term is applied to argillites occurring higher in the Cambrian. The term is specially appropriate to the Upper Etcheminian, not only because the nature of the rock fully meets the meaning of the term used, but because to this horizon or to that of Protolenus just above, belong the slate quarries of Trinity bay in Newfoundland. Some of the slates of this age in the Mira valley may be of economic value.

Mineral deposits. In the Bretonian or upper part of the Cambrian of Cape Breton, no mineral deposits of economic value are known to me. The soft con-

dition and ready disintegration of the rocks of this division have resulted in the production of fine soils, which add to the fertility of the Mira valley. Without this soil the farms in this valley would be stony and unproductive. The pale buff soils which they produce are in striking contrast with the red soils resulting from the degradation of the Lower Etcheminian rocks, or the stone-laden areas covered with fragments of the Coldbrook volcanic rocks, or the still older Pre-Cambrian syenites.

Chemistry and Mineralogy.

By Dr. G. C. Hoffmann.

Chemical work.

In reporting on the work done in these branches of the Survey's operations, Dr. Hoffmann says:—'The work carried out in the chemical laboratory during the past year has been conducted upon the same lines as those heretofore followed—that is to say, it has been almost exclusively confined to the examination and analysis of such minerals, etc., as were deemed likely to prove of more or less economic value and importance. Briefly summarized it embraced:—

Various analyses.

'1. Analyses of fuels, including, among others, peat from the province of Quebec; coal from Black brook, Cochrane lake, province of Nova Scotia, from Dunsinane, King's county, province of New Brunswick, and from section 24, township 6, range 23 west of the fourth principal meridian, District of Alberta, North-west Territory; and of lignite from Little Bow river, also in the district of Alberta.

'2. Analyses of iron ores from, among other places, the west side of Middle river, Victoria county, and Cleveland, Annapolis county, in the province of Nova Scotia; the township of Sarawak, in Grey county; a short distance north of the north-east arm of Lake Temagami; Iron lake, north of the north-east arm of Lake Temagami; Turtle lake, north of the north-eastern extremity of the north-east arm of Lake Temagami, and Michipicoten, in the district of Algoma; also the township of Strange; and a point near White Fish lake, district of Thunder Bay, in the province of Ontario.

'3. Analyses in regard to nickel contents of pyrrhotite from the townships of Graham and Dowling, in the district of Algoma, province of Ontario; and from Shuswap lake, Yale district, in the province of British Columbia.

Assays for gold.

'4. Assays for gold and silver, of numerous samples of material from quartz veins in the Yukon district, North-west Territory, most of

which proved to be more or less auriferous, two in particular, namely, one from a vein on the McQuesten, at a point about 120 miles above its entry into the Stewart, and another from a claim at the head of Victoria gulch, both of which contained at the rate of over two ounces of gold to the ton of 2,000 lbs. Also of samples of ore taken at different depths from a vein situate between the forks of Five-mile creek, a stream flowing into the west arm of Kootenay lake, and from other localiti s in the West Kootenay district of the province of British Columbia. As likewise of specimens from a quartz vein at Kiwagama lake, south-east of Abitibi post, Lake Abitibi, in the province of Quebec.

Limestones and dolomites.

'5. Analyses of limestones and dolomites, including that of a limestone from the twenty-sixth lot of the seventh range of the township of Weedon, Wolfe county, in the province of Quebec; and of a dolomite from near Brookville station, St. John county, in the province of New Brunswick. A continuation of the series of analyses of such stones which have from time to time appeared in my annual reports, in connection with an inquiry into their individual merits for structural purposes, suitability for the manufacture of lime or for hydraulic cement, or employment for metallurgical and other uses.

Natural waters.

'6. Analyses of natural waters, with a view of ascertaining their suitability for domestic or manufacturing purposes, or possible value as remedial agents, from a well in the town of Lunenburg, Lunenburg county, and from a spring on the farm of Angus Cameron, about a mile and a-half below Scotsville, on the west side of Margaree river, Inverness county, in the province of Nova Scotia; from a spring four miles from Andover, on what is called the Indian Reserve, Victoria county, in the province of New Brunswick; from a boring at Ramsay's Corners, on the eighteenth lot of the seventh concession of the township of Gloucester, Carleton county, in the province of Ontario; from a spring above West Pinchbeck, Riske creek, district of Cariboo, and from a spring at the north end of Atlin town, on the east side of Atlin lake, in the extreme north of Cassiar district, in the province of British Columbia.

New minerals.

'7. Analyses of some minerals not previously recognized as occurring in Canada, and the examination of many others, in most instances of economic importance, from localities where they were not previously known to occur, all of which will be referred to in detail in my next annual report.

Various examinations.

'8. Miscellaneous examinations, such as the examination, and, in many instances, partial analysis, of samples of bituminous shale, bog-

manganese, clays, copper-ore, graphite, iron-ochres, marls, river sands for gold and platinum; silts, and other material not included under the preceding headings.

Information as to specimens.

'In addition to the work already outlined, a very large number of mineral specimens, seven hundred and five, have been received, during the period in question, for identification or analysis, or the obtaining of information in regard to their economic value. Of these, very many were brought by visitors; the greater number, however, were received from residents in more or less distant parts of the Dominion. The information required in regard to those specimens which were brought by visitors, was not infrequently communicated to them at the time of their calling, or failing that, owing to a more than mere cursory examination being necessary, or when a partial or even complete analysis was considered desirable, it was subsequently conveyed to them by letter; whilst that sought for in regard to those sent from a distance, was also, necessarily communicated by mail.

Letters and reports.

'The number of letters personally written, in connection with the work just referred to, and which were mostly of the nature of reports embodying the results of the examination, analysis or assay, as the case might be, amounted to three hundred and twenty-four, whilst the number of those received amounted to one hundred and twenty-eight

'My annual report, giving a detailed account of the chemical and mineralogical work briefly referred to in my summary report for last year, has been written, passed through the press and is now in the hands of the binder.

'Messrs. R. A. A. Johnston and F. G. Wait, assistants in the laboratory, have, as a result of the interest taken by them in their work, and their great assiduity, accomplished a large amount of work, and proved most efficient aids. Of these,—

Mr. Johnston's work.

'Mr. Johnston has carried out a series of gold and silver assays, made many important mineral analyses, and also conducted a great variety of miscellaneous examinations. Of the mineral analyses made by him, one, in particular, calls for special mention, namely that of a mineral containing a large percentage of chromium which has recently been found in considerable quantity in the district of Lillooet, province of British Columbia. He has also recognized among some mineral specimens received for identification, a compact massive form of datolite, a mineral which had hitherto been met with in but one locality in Canada; and he has likewise identified, in some small crystals, occurring in specimens of a vein-stone collected by Mr. Broadbent, and to which

my attention was drawn by the latter, the mineral faujasite, a species which had not previously been found in the Dominion.

Mr. Wait's work.

'Mr. Wait has made a number of water analyses, analyses of iron ores, manganese ores, limestones and dolomites, &c., and also conducted many miscellaneous examinations. Among the waters examined by him was one of particular interest, in whatever light regarded, namely, that from a spring at the north end of Atlin town, on the east side of Atlin lake, Cassiar district, in the province of British Columbia. This water which was very carefully and most obligingly collected and furnished by Mr. W. J. B. Pinder, of Atlin, has been shown by the exhaustive analysis of Mr. Wait to contain—disregarding for present purposes the constituents occurring in minor quantity—as much as 433·48 grains of bicarbonate of magnesia in an imperial gallon. There can be little doubt but that it is to this and similar springs that the extensive deposits of hydromagnesite occurring at the back of Atlin town site, owe their origin. The material of these deposits, as likewise the water itself, will, most probably, in the near future, receive the attention they deserve.

Mr. Broadbent's work.

'In the work connected with the mineralogical section of the museum, I have, as heretofore, been ably assisted by Mr. R. L. Broadbent, who has, apart from the general museum work—which includes the labelling and cataloguing of all newly received specimens, and the maintenance of the collection generally, in an orderly condition,—arranged and catalogued the collection of foreign minerals, which now comprises some five hundred specimens. He also spent some time in the field for the purpose of collecting cabinet specimens for the museum, and others for Mr. Willimott's use in making up collections for distribution to Canadian educational institutions. With this object in view, he visited several localities in the townships of Portland East, and Derry, in Ottawa county, province of Quebec; those of Madoc, Marmora lake, and Dungannon, in Hastings county, and that of Bagot, in Renfrew county, in the province of Ontario. He made it a special point to visit the locality of occurrence of the datolite—the mineral previously referred to, and succeeded in collecting a fine series of specimens of the same and its mineral associations. On handing these to me he drew my attention to some small crystals which he had observed on some them. These crystals were subsequently examined and, as already stated, identified by Mr. Johnston as the somewhat rare mineral faujasite—a species new to Canada. Among other specimens collected by Mr. Broadbent, may, in addition to the foregoing, be more particularly mentioned, some interesting specimens of native antimony—a mineral not previously met with in Ontario, from the

Faujasite.

Minerals collected.

township of Madoc, and some good specimens of crystallized malachite, from the township of Dungannon. The minerals collected by him comprised :

	Specimens.	Weight.
Almandite	27	
Andradite		470 pounds.
Arsenopyrite		200 "
Celestite		175 "
Datolite	120	
Faujasite	6	
Fluorite	100	
Galena	135	
Graphite	12	
Hematite		200 "
Limestone		100 "
Lithographic stone		175 "
Malachite	6	
Native antimony	30	
Perthite	225	
Phlogopite	306	
Sandstone		100 "
Stilpnomelane	7	
Talc		100 "
Tourmaline	35	
Miscellaneous	12	

Additions to the museum.

'The additions to the mineralogical and lithological section of the museum, during the past year, embraced :—

(A.) Collected by members of the staff or others engaged in field-work in connection with the Survey :—

Bailey, Professr L. W. :—

a. Eighteen fragments of material referred to as copper ore, from a pit at Chester, Albert county, N.B.

b. Fourteen fragments of material from the Colonial copper mine, near Dorchester, Westmoreland county, N.B.

c. Two fragments of cordaite shale from two miles above Dalhousie, Restigouche county, N.B.

Barlow, Dr. A. E. :—

a. Danaite from the township of Graham, district of Algoma, O.

b. Corundum from the township of Raglan, Renfrew county, O.

Johnston, J, F. E. :—

Molybdenite and bismuthinite from Lake Kewagama, Q.

Additions to the museum.

McConnell, R. G. :—

a. A specimen of asbestiform actinolite from the Klondike river, Yukon district, N.W.T.

b. A specimen of rutile from Thistle creek, Yukon district, N W.T.

(B.) Received as presentations.

Barlow, Dr. A. E., Geological Survey :—

Corundum from Montana, U.S.

Bulpit, C. H., Malone, Hastings county, O. :—

Magnetite from lot 17, con. XI., Marmora, Hastings county, O.

Burke, D. F., Port Arthur, O.

Coal from near Blairmore, Crow's Nest Pass Railway, Alberta, N.W.T.

Canada Paint Company, Montreal, Q. :—

Iron ochre from Cap de la Madelaine, Champlain county, Q.

Chambers, R. E., Bridgeville, N.S. :—

a. Barite crystals from Bridgeville, Pictou county, N.S.

b. Limonite from Bridgeville, Pictou county, N.S.

Craig, B. A. C., Canada Corundum Company, Toronto, O. :—

Twenty samples of dressed corundum from the Craig mine, Raglan, Renfrew county, O.

Harrison, J. E., Madoc, O. :—

Talc from Huntingdon township, Hastings county, O.

Holmes, N. D., Ottawa :—

Mica from Dakota, U.S.

Hopkins, W. H., Hamilton, O. :—

Auriferous quartz from the Mikado mine, Lake of the Woods, district of Rainy River, O.

Kirkgaard, P., Canadian Gold Fields Company, Delora, O. :—

Auriferous quartz from the Florida mine, and auriferous quartz (Ribbon quartz) from the Last Chance mine, Mogollon Mountains, New Mexico, U.S.

Additions to the museum.

Low, A. P., Geological Survey, Ottawa, O. :—

a. Scheelite, rose quartz, and quartz crystals from Japan.

b. Petzite from Calgoorlie, West Australia.

c. Noumeaite and Garnicrite from New Caledonia.

Moberly, G., and C. Cameron, Collingwood, O. :—

Marl from lots 25 and 26, con. VII and VIII, Flos township. Simcoe county, O.

Moon, Albert, Madoc, O. :—

Specimen of native antimony from the Dufferin mine, Madoc, Hastings county, O.

Morison, Murdoch, Renfrew, O. :—

Zircon, from the township of Westmeath, Renfrew county, O.

McEvoy, James, Fernie, B.C. :—

Erythrite from the Crow's Nest branch of the Canadian Pacific Railway, between Creston and Kootenay Landing, West Kootenay district, B.C.

McNaughton, G. W., General Electric Mining Company, Sydenham, O., per Dr. R. W. Ells :—

Mica (phlogopite) 33 by 24 inches, from lot 11, con. VII, Loughborough, Frontenac county, O.

Rust, Randolph, Port of Spain, Trinidad, West Indies :—

Asphalt and petroleum from Aripero, Trinidad, W. I.

Scott, W. D., Winnipeg, Man. :—

Petzite from the Boulder Perseverance claim, Calgoorlie, West Australia.

Shirley, F. S. Glenalmond, Q. —

Mica (phlogopite) from Portland East, Labelle county, Q.

Stewart, James, Grande Prairie, B.C. :—

Calcareous tufa, actinolite, andradite and tremolite

Wallbridge, C. M., Madoc, O. :—

Group of calcite crystals from the Wallbridge mine, Madoc, Hastings county, O.

Winning, Bush, Glenalmond, Labelle county, Q. :— Additions to the museum.

Mica (phlogopite) from the township of Derry, Labelle county, Q.

In addition to the foiegoing, there has also be›n added to this section of the museum :—

109 specimens of rocks, with microscopic sections, from the Yukon district, N.W.T., collected by R. G. McConnell.

56 specimens of rocks, with microscopic sections, from the Atlin district, B.C., collected by J. C. Gwillim.

226 specimens of rocks, with microscopic sections, from the East coast of Hudson Bay, Ungava district, collected by A. P. Low.

58 specimens of rocks, with microscopic sections, from Great Slave lake, Mackenzie district, collected by Dr. R. Bell and J. M. Bell.

15 specimens of rocks from Great Slave lake, collected by J. W. Tyrrell.

8 specimens of rocks from the West coast of Hudson Bay, Keewatin district, collected by D. T. Hanbury.

'Mr. C. W. Willimott was engaged during the early part of the year in going over, arranging, and taking stock of the collection of minerals under his charge and employed by him in the making up of collections for distribution, in order to ascertain what further material it would be necessary to procure in the course of the summer, to make good deficiencies. This accomplished, he visited, for the purpose specified, numerous localities in the townships of Hull, Templeton, Wakefield, Wright, and Egan, in Ottawa county, province of Quebec; subsequently, certain localities in the township of Grenville in Argenteuil county, Bolton in Brome county, Ascot in Sherbrooke county, Coleraine and Thetford in Megantic county, and Broughton in Beauce county, in the province of Quebec; and finally, localities on the East River of Pictou, in Pictou county, Parrsborough, Partridge Island and Two Islands, in Cumberland county, Kingsport in King's county, and Hantsport and Windsor in Hants county, in the province of Nova Scotia. Mr. Willimott's work. Educational collections supplied.

'In the prosecution of this work he succeeded in collecting a large and varied assortment of minerals. The same comprised :— Minerals collected.

	Specimens.	Weight.
Agate	....	250 pounds.
Analcite	80	
Amygdaloid	....	200 "
Apatite, crystals in matrix	140	
Chabazite	200	

	Specimens.	Weight.
Chromic iron	....	450 pounds.
Chrysotile (asbestus)	....	75 "
Chrysotile, in serpentine	....	300 "
Gypsum, fibrous	....	200 "
Heulandite	120	
Hornblende schist	....	300 "
Lepidolite	....	50 "
Limestone	....	200 "
Limonite	....	650 "
Phlogopite	60	
Picrolite	....	150 "
Quartz crystals	900	
Scapolite	....	175 "
Steatite	....	200 "
Stilbite	150	
Strontianite	....	350 "
Tourmaline	123	
Miscellaneous	30	

'In addition to the above minerals, Mr. Willimott has received, for making up collections:—

Presents.

Coal, of the Carboniferous, presented by E. Hargreaves, Esq., Manager of the Springhill Coal Mines, Nova Scotia, 200 pounds.

Corundum crystals, in the matrix, presented by B. A. C. Craig, Esq., Canada Corundum Co., Toronto, Ontario, 2000 pounds.

Gypsum, presented by C. J. Osman, Esq., Manager of the Albert Manufacturing Co., Hillsborough, Albert county, New Brunswick, 300 pounds.

Educationa collections.

'Prior to Mr. Willimott's leaving for the field, and since his return, he has, for the most part, been engaged in making up collections for distribution to various Canadian educational institutions. The following is a list of those to which such collections have been sent:—

High School, Paradise, N.S	consisting of	100	specimens.
Public School, Rainham Centre, O	"	100	"
Waller Street School, Ottawa, O	"	100	"
Public School, Nelson, B.C	"	38	"
High School, Gananoque, O	"	125	"
Broadway School, Woodstock, N.B	"	125	"
High School, Carleton Place, O	"	125	"
Normal School, London, O	"	125	"
High School, Wood's Harbour, N.S	"	125	"
Collegiate Institute, Whitby, O	"	125	"
High School, Newmarket, O	"	125	"
High School, Westville, N.S	"	125	"
Grand Falls Superior School, Grand Falls, N.S.	"	125	"
High School, Pembroke, O	"	125	"
High School, Rodney, O	"	125	"

'In addition to which the undermentioned have been supplied with :—

McGibbon, R. D., Montreal, Q.	1	specimen.
Collegiate Institute, Napanee, O	1	"
Guerra, René, Paris, France	30	"
Wright, W. G. Hawkesbury, O	1	"
Fisher, Hon. S., Ottawa, O	1	"

The Progress of Mining in Canada in 1901.

Mr. E. D. Ingall, Mining Engineer to the Department.

Review of mining industry.

In reviewing the progress of mining in Canada, only the general features can be pointed out, as no detailed and reliable data are available until after the close of the year.

Gold.

The gold-mining industry naturally calls for attention first, accounting as it does for nearly half the value of the mineral product of the country. No very startling developments were presented during the year as far as the eastern part of Canada is concerned. In Nova Scotia the mines operated upon the quartz leads are practically all long-established enterprises, and the industry with slight fluctuations, pursues year by year the even tenor of its way. The mining of the alluvial gold in Quebec province, remains still in abeyance. In Ontario there is not much to note. In this province are many belts of the rocks shown as Huronian on the maps of the Survey, which in the aggregate provide a large area of this metalliferous series. As railway construction makes the outlying portions of the province easier of access, more vigorous and thorough search over these areas by the prospector will doubtless reveal many other gold-bearing veins, so that future years promise to show a steady extension of operations in this province. Whilst the output of gold from the Yukon placers hardly comes up to that of 1900, doubtless other rich districts will be found in future years in other parts of this extensive country. The reports of finds of rich gravel in some of the older districts of British Columbia, where the richer placers had been supposed to have been worked out years ago, show that unexpected discoveries of great importance may be made at any time in a young and undeveloped country such as this. Apart from the production of gold from the shallower placer deposits, the progress in hydraulicing, etc., as well as in vein-mining, is steady, with every chance of continued advance in future years.

The grand total of the production of gold in Canada owes much also to the operations in the mining and smelting of the pyritous ores

of Southern British Columbia, the rapid growth of which in late years will have an important effect.

Copper. The larger proportion of the copper production of Canada results also from the operations on these deposits of mixed sulphide ores, not only in the districts of East and West Kootenay and Yale, but also in the coast sections of British Columbia, and the largely increased activity in this respect will result in a considerable augmentation of the copper output of the country, which result will be still further enhanced by the growth of the mining industry located in the Sudbury district. The interest which has of late been taken in the copper ore deposits of the Huronian district between Bruce Mines and Sault St. Marie, resulting in the reopening of the old mines at the former place and the exploitation of similar deposits in the surrounding district, is an interesting feature of the present copper situation. The long-established mines in the Eastern Townships of Quebec province can be reckoned on as constant contributors, and word comes to hand as to increased interest and activity in exploration in the Maritime provinces. Taken as a whole, the copper industry of the Dominion has exhibited many satisfactory features which should show when the figures of production become available later.

Nickel. The nickel industry of Sudbury district has also many encouraging features to record. The inauguration of the works of the Mond Co., of the Nickel-Copper Co. of Hamilton, and of the Oxford Copper Co. give evidence of the general prosperity, resulting in greater activity in smelting as well as in mining and prospecting.

Lead. Unfortunately the lead industry, which, with the exception of small amounts produced in the east, is practically confined to British Columbia, has suffered a considerable set-back. The operators of the Slocan and other galena mines in the south-western part of the province have found themselves largely debarred from their chief market in the United States, owing, it is said, to difficulties regarding freight and smelter rates, so that production of this metal will have suffered a very considerable falling off. The authorization of the payment of a bounty by the Dominion Government for the next five years on all lead refined in Canada from materials produced in Canadian smelters from Canadian lead ores, may perhaps lead to the installation in the country of works for this purpose and so relieve the situation by rendering the home mines independent in this respect. The price of lead also has been somewhat lower than the average for 1900, tending to further depress the situation.

As such a large proportion of the silver production of the country is represented by that contained in the argentiferous galena mined in British Columbia, the depression in the lead industry will also affect the output of silver. Silver.

One of the most hopeful features of the progress of the mineral industry during 1901 is to be found in the advance which has been made in the important branches of coal and of iron mining and smelting. The new departure made at Sydney, Nova Scotia, in the inauguration of the two large iron and steel plants of the Dominion Iron and Steel Company and the Nova Scotia Steel and Coal Company respectively, will doubtless lead to most important results, not only in enlarged mining of coal and the making of coke for consumption in the iron works, but also doubtless in the establishment of other important accessory industries, such as ship-yards, bridge works, &c. All over the country, increased interest has been shown in the question of our resources in iron ores, and even in British Columbia, where iron has been quite an unimportant factor in the past, much greater attention is being paid to exploration for these ores. The opening up of the Crows Nest Pass coal fields and the considerable enlargements made and contemplated in the coking plants of the companies operating them, is a fact of the greatest importance, especially to the smelter interests already established or about to be inaugurated in the west, and we may look forward to the opening up of yet other areas of Cretaceous coal in this region as extensions of the railways bring them within the sphere of working conditions. Coal and iron. Development at Sydney N.S.

An epoch-marking episode is to be noted in the shipments of Canadian pig iron from Cape Breton to Glasgow, Scotland, at prices, it is said, admitting of successful competition there, even with Scotch pig. The importance and promise of the iron and coal industries of our eastern seaboard, have begun to attract notice, and in a contribution to the *Colliery Guardian*, Sir Christopher Furness, the well-known English authority, draws the attention of his countrymen to many important features. He points out the unexcelled shipping and loading and unloading facilities both with regard to the ore supply at the Newfoundland mines and at the works and mines in Cape Breton. Also, that the excellent arrangements and the extensive use of machinery result in a much larger output per man and a much smaller cost of production than is possible under the present conditions of the British collieries, so that with the advantages possessed, 'with two splendid harbours and no high railway rates for carriage to the water, also with an unlimited supply of coal, they are in a position to produce and deliver f. o. b. at a figure quite out of the question for any of our Canadian pig iron for Scotland.

collieries to compete with.' He further expresses the opinion that the coal from this point will be bound to enter into competition 'with our north and south country coal in the Mediterranean markets,' also that the company can deliver coal f. o. b. at less than $1 per ton. The steel company will be able to make pigs at less than $6 per ton; steel blooms at less than $10 per ton, and steel rails at about $12.'

Iron smelting.

The possibilities of iron smelting in the central parts of Canada are being demonstrated in the continued operation of smelters at Deseronto, Hamilton and Midland, in Ontario, whilst the inauguration of the contemplated iron and steel plant at Sault Ste. Marie will be a most important feature in the industry. The works in this province still use a very large proportion of foreign ore, but the increased output from the Michipicoten district would seem likely to inaugurate a brighter era.

To the metal and coal-mining industries, already alluded to, must be credited about 85 per cent of the value of the total mineral production of the country. Regarding the non-metallic mineral output contributing the other 15 per cent, there is nothing very unusual to report, although there are some interesting points worthy of note.

Graphite.

After some years of depression, the graphite industry carried on in western Quebec, seems to be in a fair way to be placed on a permanent basis. Work was prosecuted at the deposit at Calumet and some selected mineral was shipped. The North American Graphite Company worked during most part of the year and shipped a number of car loads of the finished product of its mill. It is hoped that the investigations and experiments during past years, made by this company, have resulted in such improvements in the methods and machinery for the treatment of the rock that the difficulties encountered in the past will no longer debar the development of the extensive deposits of graphite-bearing rock of the vicinity. In Ontario, the Ontario Graphite Company has been taking steps to extend its operations by erecting a mill for the treatment of the ore.

Asbestus and mica.

In asbestus, the mines have been operated as usual. The mica mines had to contend with dullness of the trade and accompanying low prices.

Natural gas.

In the inter-lake peninsula of Ontario, as in past years, a number of bore-holes were put down in connection with the operation of oil and gas fields and a few pools of oil were thus located. Difficulties begin to be met with in regard to the supply of natural gas, the pressure being said to have lessened rapidly during last year in the Essex field and trouble with water in the wells having been encountered. It is claimed, however, that so far there has been no serious

falling off of pressure in the Welland field. An effort is being made by the Provincial Government to prevent the export of this fuel to the United States, where most of it has so far been consumed, but without success so far, owing to legal difficulties encountered in trying to apply the law.* This failure is regrettable, as gas to the value of nearly three million dollars since the commencement of the industry, rating it at a very low price per thousand, has been produced, the greater part of which went to build up industries outside of Canada, which gained very little proportionately by the exploitation of this mineral asset of the country. Some little attention was paid to the further exploration of the North-west Territories for gas with results which have, so far, not transpired. Export of gas.

In the cement industry, considerable activity has been shewn in the formation of new companies and the erection of new works for the manufacture of Portland cement, chiefly in Ontario. As this industry naturally connects closely with the general prosperity of the country its rapid growth of late years is a most encouraging sign. Portland cement.

The central portions of the Dominion being unfortunately lacking in any supply of coal, the growing interest taken in the utilization of the large resources in peat is of great importance. At several points works are in operation or being erected, including the large and important plant of the Trent Valley Peat Company, near Peterborough, Ontario. Peat.

It is gratifying to note also that the corundum deposits are still being developed. The existence of corundum in Ontario was pointed out some years ago by officers of the Geological Survey. The Canada Corundum Co. worked its mill the greater part of the year. The plant is capable of turning out three tons of pure corundum per day. These operations have resulted also in showing that the material can be properly graded. Operations were also carried on in the same vicinity by another company, regarding which no particulars are to hand. Corundum.

As usual, inquiries have been made at the Department regarding a number of mineral substances which are of economic value or are becoming so. A list of these has already been given in the first part of this report. Among the more important and interesting are platinum, felspar and molybdenite. There has been a small production of platinum in British Columbia for many years, but of late this has fallen off. It was obtained in connection with the placer washings on the Similkameen river. Now, however, that the demand has so Platinum.

* The above was written in December last. Since that time exportation has been stopped.

increased and that the prices quoted give it a higher value than gold, it is hoped vigorous prospecting will result and that further deposits may be found. Important data regarding the geological conditions which may be taken as indicative of the most likely places to look for the metal, will be found in the remarks of Mr. R. Brock in this report, and in the forthcoming advance statement of this Section it is intended to give further information bearing on the subject.

Molybdenite.

The demand for molybdenite at good prices still keeps up, so that with the discovery of workable and accessible deposits, a new industry could be inaugurated. This mineral is of common occurrence in the Laurentian rocks of Eastern Canada and discoveries are also reported from British Columbia. At no point, however, has it, so far, been developed sufficiently to prove its existence in commercially workable quantity. It seems to occur mostly as disseminated crystals in quartz veins, and where the larger and thicker foliated crystals are plentiful, it would seem that profitable extraction by crushing and hand picking should be possible in view of the prices offered, viz. $200 to $250 per ton for the pure mineral. With regard however to the class of ore carrying the mineral evenly disseminated in small flakes, as is so often the case, difficulty would probably be experienced in making an efficient separation by the usual methods of ore-dressing, the flakes being apt to float away with the lighter gangue material. The results of experiments to test this, which were made at McGill University mining laboratory, are given in the Summary Report of the Director of the Geological Survey for 1900.

In the foregoing remarks no effort has been made to give other than a sketch of the main features of the mineral industry of the country, viewed as a whole, for the year 1901. Many details will be found in the accompanying reports of the different field officers of the Survey for the various districts, and in the full report of the Mines Section to be published later in the year, will be found the detailed statistics and technology of each mineral industry.

Mapping and Engraving.

C. O. Senécal, Geographer and Chief Draughtsman.

Report of Geographer and Chief Draughtsman.

I have the honour to report as follows on the work carried out under my supervision during the period which has elapsed since January 1, last. The staff has been increased in number since June 1, and at present ten map-compilers and draughtsmen, including four field-

assistants, who also attend to mapping when not actually employed in field work, are engaged in compiling and putting in shape for publication, parts of the field work and maps hitherto left in arrear, and in attending to the current work of the office. Staff.

During the past summer, several of these men having been sent to the field as usual, the work they had in hand, was, of course, temporarily stopped. The Klondike topographical and geological map and several sheets of the Ontario and Nova Scotia series have thus been delayed, but these will be resumed at the earliest date possible and will likely be ready for publication during the course of the winter.

The routine work, including laying down geographical projections, correcting proofs of maps and reports, making tracings and drawings for office and field use, supplying information to the librarian, preparing various memoranda in reference to the reproduction of maps, engravers' accounts and other subjects, has been distributed among the staff and attended to. Routine work.

The assignment of work has been as follows :—

Mr. L. N. Richard has drawn for reproduction by engraving, the Manitou Lake sheet, No. 4, Western Ontario series ; has prepared for lithography the coloured copies of the Trafalgar and Stellarton sheets, Nos. 42 and 43, Nova Scotia series. A list of place-names covering the map of the Atlin mining district, B.C., for the Geographic Board was made by him, and he also reduced part of Dr. R. Bell's astronomical observations made in Baffinland. During my absence from the office on field duties, his time was spent in cataloguing maps, making reductions of railway and other plans for field use, supplying information to the librarian and in general draughting work. He has now in hand the revision of the map of the district around Bancroft, Ontario. For the purpose of completing the western portion of this sheet, he was sent on August 16, to meet Dr. F. D. Adams in the field, and under the latter's instructions to make micrometer surveys along several roads in the townships of Glamorgan, Monmouth, Cavendish and Anstruther. He returned to this office on September 9. Assignment of work.

Mr. W. J. Wilson, who last year had accompanied Dr. R. Bell, in the Michipicoten region, was occupied in laying down on the scale of publication, the material gathered for sheets 143 and 156, Ontario series, covering part of that district. He also attended to general draughting work required in the office. He left for the field accompanied by Mr. J. F. E. Johnston, under instructions from the director on June 10, and both returned on October 20. The above mentioned

compilation will be resumed by Mr. Wilson as soon as he has completed his report on this summer's work.

Mr. J. F. E. Johnston will continue the topographical mapping of the Klondike sheet, which will probably be completed and ready for publication before the end of the present calendar year.

Mr. E.O. Prud'homme has had charge, as in former years, of the maps held in stock for sale and distribution. Besides making several drawings for office and field use, he has drawn and lettered for the engraver the following maps and plans, viz., maps of the city of Ottawa and vicinity in Ontario and Quebec, and of the Atlin mining district, B.C., plans of Montague and Waverley gold districts in Nova Scotia, and partly the East Kootenay sheet, B.C. He has also spent some time in labelling rock specimens, etc. A series of diagrams showing the mineral productions of Canada, and five sketch-maps of new explorations are also being drawn by him for photo-lithographing.

Special map for Pan-American Exhibition.

Mr. J. Keele has compiled the greater part of sheets 119 and 122, Ontario and Quebec series, and constructed a special wall map of parts of the counties of Frontenac, Renfrew, Lanark and Leeds, for the Pan-American Exhibition. This map was prepared on the scale of two miles to 1 inch, in response to a request from the Kingston Board of Trade, but was not, however, intended for pnblication. Mr. Keele was away on leave of absence from February 26 to April 23, and left for the field as assistant to Mr. R. G. McConnell in the Klondike region in the beginning of June. He returned to this office on October 15 and will resume his work on the Ontario sheets as soon as he shall have completed the sketch-maps of the exploration of 1901 in the Yukon district, which he is at present compiling for the Summary Report.

Mr. H. Lefebvre continued the compilation of the Lake Nipigon sheets, attended to the cataloguing of maps, plotted sheets, note-books, &c., and was employed on general draughting work until he left the Geological Survey on April 1.

Mr. W. H. Boyd completed the compilation of the geological map of Atlin mining district (No. 742). He was detached to assist Mr. D. B. Dowling in the field from May till October, and since his return has been occupied in reducing astronomical observations, compiling a small sketch-map of the past summer's exploration in Keewatin for publication in the Summary Report and in plotting his survey.

Mr. J. A. Robert, who, a few years ago, had in this department acquired some experience in map-compiling was re-employed and since

May 7 has been occupied in mapping Mr. H. Fletcher's surveys, covering sheets Nos. 59 to 63 and 76 to 79, Cumberland county, Nova Scotia.

Mr. O. O'Sullivan has been employed on general work from April 13 to 29. He has since been occupied in reducing and compiling Mr. E. R. Faribault's surveys made in Halifax county, Nova Scotia, on sheets Nos. 53, 54, 67 and 68. During the summer he was instructed to accompany Mr. Faribault to Nova Scotia and there to continue this work, the nature of which required this officer's personal supervision. Mr. O'Sullivan also assisted me in the field from July 18 to August 7.

Mr. Paul Frèreault has been employed in this office since June 3. He has drawn on autographic paper for lithography a series of thirteen maps of mines, intended to illustrate the report of the Mining Engineer of this Department, on the iron ore deposits of the district traversed by the Kingston and Pembroke railway, Ontario. He reduced and transferred from the Admiralty chart, the coast of Nova Scotia from Halifax to St. Margaret's bay for map-sheets Nos. 68 to 71, the compilation of which will be undertaken at an early date. He also made several tracings and reductions of railway and other plans for field and office use, and he is at present completing the southern portion of sheet No 121, Ontario and Quebec, from Dr. R. W. Ells' surveys made in 1900.

Mr. Vincent Perrin has been employed in this office since October 15, and is now making a tracing for the engraver of the map of the Grass River region north of Lake Winnipeg, and attending to general draughting work.

Mapping by field-officers.

The following maps have also been compiled and drawn by field officers from their respective surveys:—

Grass river region, Keewatin, scale 8 miles to 1 inch, by Mr. D. B. Dowling.

East coast of Hudson Bay, Ungava, scale 8 miles to 1 inch, by Mr. A. P. Low.

West Kootenay sheet, B.C., scale 4 miles to 1 inch, by Mr. W. W. Leach.

East Kootenay district, B.C., (preliminary sheet) scale 4 miles to 1 inch, by Mr. J. McEvoy.

Crows Nest coal-fields, B.C., scale 2 miles to 1 inch, by Mr. J. McEvoy.

Mr. J. M. Bell mapped his exploration of Great Bear lake and route between this lake and Great Slave lake, on a scale of 8 miles to 1 inch.

A map of the northern portion of Labrador peninsula, compiled from recent explorations and sketches from natives, has been received from Mr. A. P. Low, and will appear in the Summary Report for the present year. Although not published as a geological map, it will add to our knowledge of the geography of this almost unexplored region.

The West Kootenay sheet, British Columbia, which has been sent in parts to the engraver since 1898, has been completely engraved. Proofs have been received and the geologically-coloured copy is being prepared. This sheet is of the same scale and covers the same area as the Kamloops and Shuswap sheets, namely 80 miles square.

Size of British Columbia sheets reduced.

While British Columbia is fast developing its mineral resources, the difficulty of accurately mapping the geology and topography of its southern portion necessitates surveys which, on account of the mountainous character of the country, cannot be made as quickly as surveys elsewhere in Canada, and the time spent in the compilation of such large geological sheets is very considerable. It seems desirable in order to bring them before the public within reasonable time, that smaller map-sheets should be drawn. It is therefore suggested that the size of the sheets of the British Columbia series be reduced to one-half their original area by drawing an east and-west line through the centre of each, as shown on the accompanying index-map. An obvious advantage is that the sheets of greatest economic importance could be executed first and published without delay.

Dominion map.

The engraving of the eastern half of the Dominion map on the scale of 50 miles to 1 inch, has been completed, and the eleven colour-stones for the western half were prepared and proved, but the publication of this sheet has been delayed on account of important geological information relating to the Klondike, Great Bear lake and Great Slave lake regions, received since, and involving material changes on several of the colour-stones.

Accompanying sketch-maps.

A number of sketch-maps are being prepared for publication in the present Summary Report to illustrate part of the progress made in the field during the past summer. These maps, although quickly compiled, are sufficiently accurate to meet immediate requirements and will supply valuable information, pending final adjustment and compilation of the surveys on our regular serial sheets.

Cataloguing.

The cataloguing of maps, survey records, etc., is attended to by the staff. More space and a few presses and cabinets are desirable, in which to store conveniently the accumulated manuscript maps and other records.

SKETCH MAP
of the northern portion of the
LABRADOR PENINSULA
from exploratory surveys by
A. P. LOW, B.A.Sc.
and Eskimo sketches collected in
1899-1900

Scale 50 miles to 1 inch

Drawn for photolithography by O. E. Prud'homme.

To accompany Part A Vol. XIV.

Numerous Geographic Board meetings were attended and lists of place-names covering parts of the Atlin, West Kootenay and Grass river sheets were submitted for approval. Geographic Board.

The publication of sheets 42 to 48 and 56 to 58, Pictou and Colchester counties, N.S.,—deferred on account of certain geological points requiring final settlement—was decided upon by the director and the edition of sheet No. 42, (Trafalgar sheet) has been received from the printer. Publication of Nova Scotia sheets.

From July 15, to August 7, my time was spent in the field. For the purpose of laying an accurate base-line on sheets Nos. 67, 72 and 73 of the Nova Scotia series, upon which to tie the detailed surveys of Mr. E. R. Faribault—which are now ready for the compiler—a transit and chain line was run along the Intercolonial and the Dominion Atlantic railways from Bedford Basin to Hantsport, connecting the opposite coasts of Nova Scotia. From the data of this survey, the following points were determined :— Field work by geographer.

Locality.	Latitude.			Longitude.			Magnetic Declination.
	°	′	″	°	′	″	
Bedford station (I.C.Ry).	44	43	43	63	39	54	
Windsor junction	44	47	12	63	38	25	
Beaver Bank station (D.A.Ry.)	44	47	46	63	41	28	
South Uniacke station	44	52	10	63	47	20	
Mount Uniacke station	44	53	29	63	49	50	
Stillwater station	44	55	2	63	57	10	
Ellershouse station	44	56	45	64	0	26	20° 16′ W.
Newport station	44	57	41	64	3	26	20° 37′ W.
Windsor station	44	59	49	64	8	16	
Hantsport station	45	4	5	64	10	40	

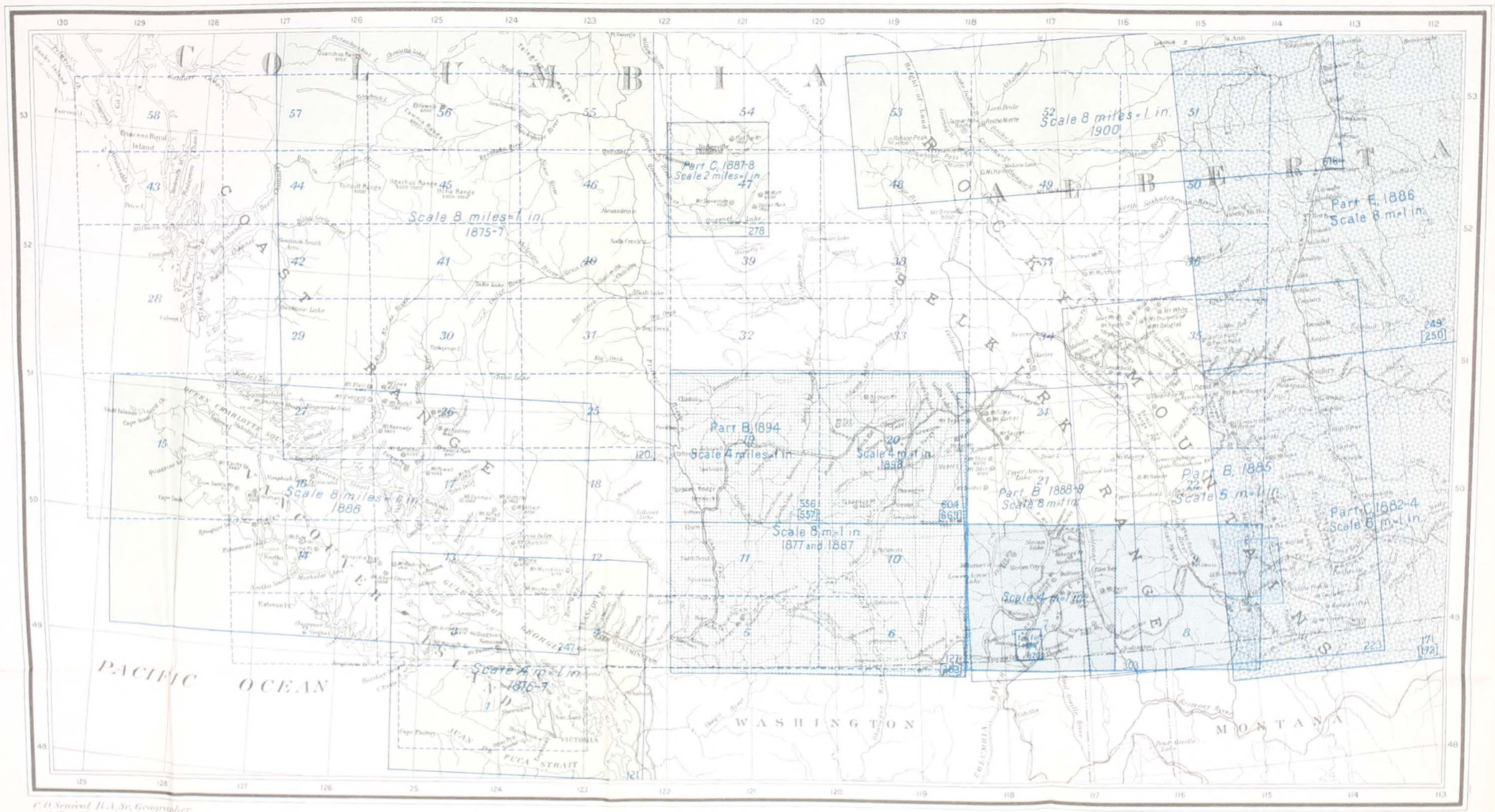
The above latitudes and longitudes depend on the position of the Halifax navy yard flag staff as given on Admiralty charts Nos. 311 and 2320.

The magnetic declination was ascertained at every station, but those observations only which were free from possible local disturbance are here recorded.

Maps etc., published.

Twenty-eight maps, one sheet of sections, four profiles and seven diagrams, published during the period covered by this report, are enumerated below :—

Catalogue Number.	Maps, Sections, Profiles and Diagrams.	Area in Square Miles.
752	Yukon District—Salmon river gold fields—Scale, 2 miles to 1 inch.	138
753	" Sixty-mile river gold fields—Scale, 6 miles to 1 inch.	
711	British Columbia—Atlin gold fields (preliminary edition)—Scale, 6 miles to 1 inch.	4,920
759	" Sections of coal-measures, Crows Nest coal fields—Scale 300 feet to 1 inch.	
751	Keewatin—Exploration of Ekwan and Trout rivers and west coast of James bay—Scale, 50 miles to 1 inch.	
758	Ungava—Sketch map of northern interior of Labrador peninsula—Scale, 50 miles to 1 inch.	
	Ontario—13 maps illustrating the mode of occurrence of iron ore deposits in eastern Ontario, viz. :—	
726	Bedford and Glendower mine—Scale, 400 feet to 1 inch...	
727	Robertville and Mary mines—Scale, 200 feet to 1 inch.. ..	
728	Fournier mine—Scale, 200 feet to 1 inch	
729	Christie lake mine—Scale, 200 feet to 1 inch.....	
730	Wilbur mine—Scale, 200 feet to 1 inch.....	
731	Yuill mine—Scale, about 37 feet to 1 inch.....	
732	Bluff point mine—Scale, 400 feet to 1 inch.....	
733	Calabogie mines—Scale, 200 feet to 1 inch.....	
734	Culhane mine—Scale, 200 feet to 1 inch	
735	Black Bay or Williams mine—Scale, 120 feet to 1 inch.....	
736	Chaffey and Matthew mines—Scale, 600 feet to 1 inch	
737	Playfair or Dalhousie mines—Scale, 50 feet to 1 inch.....	
738	Dog lake mine—Scale, 50 feet to 1 inch.....	
714	Ontario and Quebec—City of Ottawa and vicinity—Scale, 1 mile to 1 inch.	450
760	" " Sketch map of Lake Abitibi region—Scale, 16 miles to 1 inch.	
593	Nova Scotia—Sheet No. 42 (Stellarton sheet)—Scale, 1 mile to 1 inch.	216
709	" Mt. Uniacke gold district—Scale, 250 feet to 1 inch	
721	" Waverley gold district—Scale, 250 feet to 1 inch.	
764	" Geological sketch map of parts of Hants and Kings counties—Scale, 2 miles to 1 inch.	
	Four profiles to accompany report on altitudes, viz. :—	
746	Profile No. 1—Canadian Pacific Railway—Montreal to Winnipeg.	
747	Profile No. 2—Canadian Pacific Railway—Winnipeg to Vancouver.	
748	Profile No. 3—Canadian Pacific Railway—Old location via Yellowhead Pass.	
749	Profile No. 4—River St. Lawrence and Great Lakes.	
754-757	Four index maps—Part of British Columbia, Western Ontario, New Brunswick and part of Quebec, and Nova Scotia—Scale, 50 miles to 1 inch.	
	Also seven diagrams showing mineral production of Canada.	



Index

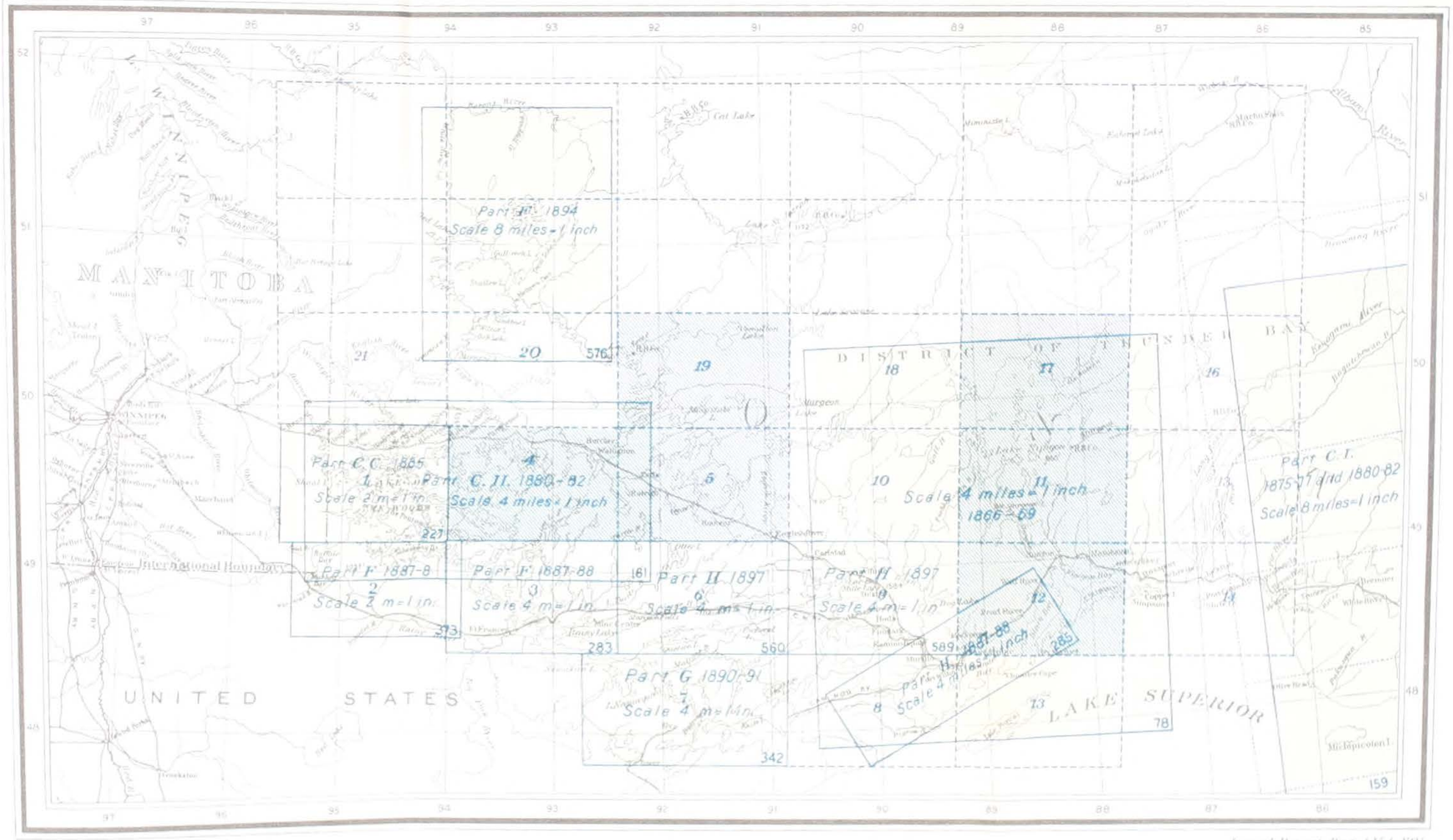
- Geological Sheets published
- Sheets in progress
- Topographical and mineral special Sheets published
- Forest Sheets published
- 25 — Sheets projected on Scale of 4 miles to 1 inch
- 25 — Special numbers
- 127 — Catalogue numbers of geological sheets
- [363] — Catalogue numbers of topographical mineralogical and forest sheets

C. O. Senécal, B.A.Sc, Geographer and Chief Draughtsman

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Index Map of
SOUTHERN BRITISH COLUMBIA
1901
To accompany the List of Publications
Scale, 50 miles to 1 inch



Index

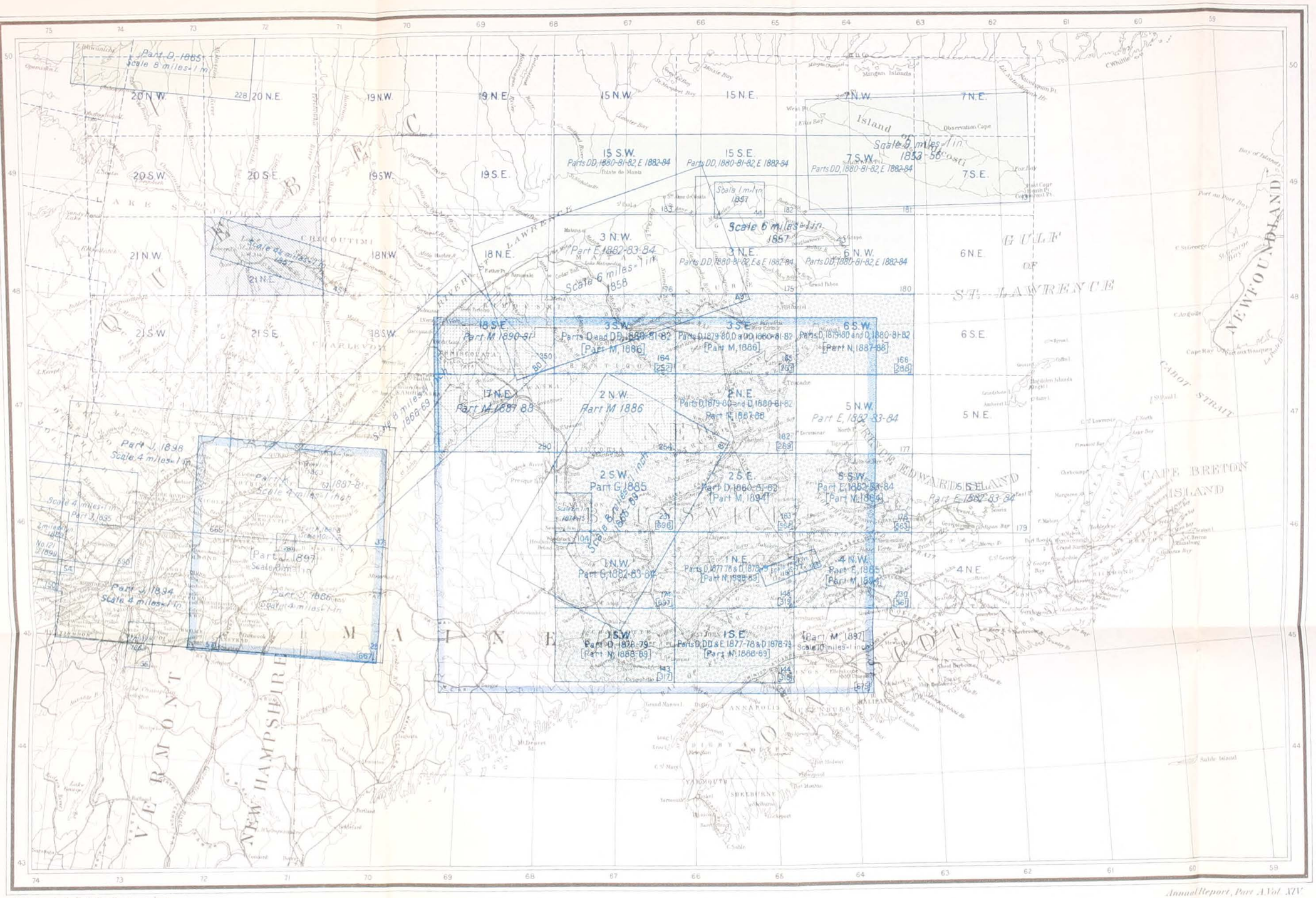
- Geological Sheets published
- Sheets in progress
- 10 — Sheets projected on Scale of 4 miles to Inch
- 10 — Serial numbers
- 342 — Catalogue numbers of geological sheets

C. O. Senecal, F.A.Sc. Geomorphier and Chief Draughtsman

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Index Map of
NORTHWESTERN ONTARIO
1901
To accompany the List of Publications
Scale 50 miles to 1 inch



Index

- Geological Sheets published
- ditto, in progress
- Surface geology and Areal sheets published
- ditto, in progress
- Mineralogical Sheets published
- 15 N.E. — Sheets projected on Scale of 4 miles to Inch
- 2 N.E. — Serial numbers
- 162 — Catalogue numbers of geological sheets
- 289 — ditto surface geology and mineral areal and Areal sheets.

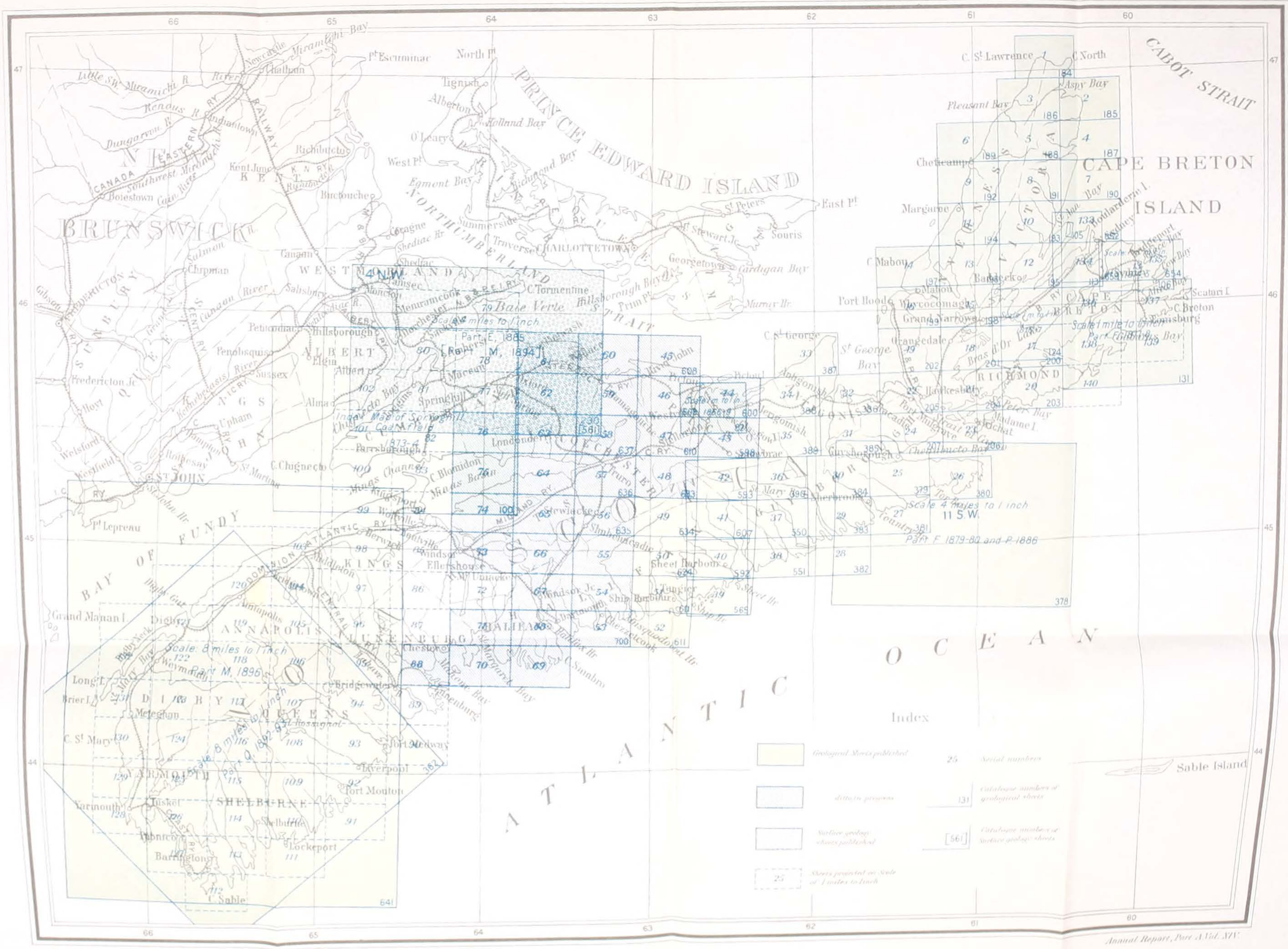
C. O. Senécal, B.A.Sc, Geographer and Chief Draughtsman

Annual Report, Part A Vol. XIV

Index Map of NEW BRUNSWICK, PRINCE EDWARD ISLAND AND PART OF QUEBEC 1901

To accompany the List of Publications

Scale, 50 miles to 1 inch



C. O. General, R.A. Sc. Geographer and Chief Draughtsman

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Index Map of
NOVA SCOTIA
1901
To accompany the List of Publications
Scale 25 miles to 1 inch

There are at present nineteen maps and plans in the engraver's hands or in press and about forty others at different stages of progress, nine of which have been completely compiled and will soon be ready for the engraver. Maps in progress.

The accompanying index-maps, showing the progress of the mapping up to date, are intended to be distributed with the List of Publications. Index maps.

The examination and repairing of the field instruments has been as usual, attended to, and I beg to report that several micrometers, aneroid barometers, chains, cameras, prismatic compasses and nearly all the compass-tripods are practically worn out, and should soon be replaced. Field instruments.

Since January the following instruments were purchased :—

One cyclotomic mountain transit and tripod, No. 14, from A. Lietz & Co., San Francisco, Cal.

One Hadley sextant, No. 7, from Cary, London, Eng.

One Abney level, No. 15 " "

Three prismatic compasses, Nos. 64, 65, 66, from Cary, London.

One 300-ft. steel band, No. 22, from W. & L. E. Gurley, Troy, N.Y.

Two 66-ft. steel bands, Nos. 23 & 24 " " "

One surveyor's compass and tripod, No. 15, from Keuffel & Esser, New York.

One watch, No. 13, from Henry Birks & Son, Ottawa.

The number of official letters, memoranda, &c., relating to map-work, sent and received was 260 and 150 respectively. Correspondence.

Palæontology and Zoology.

Dr. J. F. Whiteaves.

Dr. Whiteaves reports that 'the manuscript of the "Catalogue of the Marine Invertebrata of Eastern Canada," commenced in the fall of 1899, was completed in May last. In order to give the latest information on the subject, a considerable portion of the manuscript was rewritten in the early part of 1901. The catalogue was published on 24th of August last, and the greater part of two months was occupied in seeing it through the press. In its printed form it consists of 272 pages, large octavo, with two illustrations in the text. With the exception of the jelly-fishes and a few small crustacea, nearly all the Catalogue of Marine Invertebrata.

Number of species.

species enumerated in it are from the sea bottom, at various depths, and most of them were obtained by dredging. The number of species of invertebrata from the seaboard of Eastern Canada south of the Baie des Chaleurs that have been determined or described up to August, 1901, would seem to be 1,064, as follows:—

Protozoa	64	species.
Sponges	36	"
Coelenterata	119	"
Echinodermata	71	"
Marine worms (Annulosa)	138	"
Brachiopoda	3	"
Polyzoa	115	"
Mollusca	282	"
Crustacea	198	"
Pycnogonida	11	"
Chordata	27	"
	1,064	species.

'As remarked by Dr. Bell in his letter of introduction to this catalogue, "it is hoped that the latter will act as a stimulus to renewed activity in the study of marine zoology, and that it will be of use not only to zoologists but also to students of the fossils of the post-tertiary deposits of the eastern portion of the Dominion."

"Mesozoic Fossils."

'The manuscript of the fifth and concluding part of the first volume of "Mesozoic Fossils" was commenced in September (1901), and about fifty pages of it have been written. The part will probably be completed and ready for the printer early in the spring. It is intended to consist of descriptions or identifications of numerous additional species or specimens of fossils from the Cretaceous rocks of Vancouver and adjacent islands, with a revision of the fauna of these rocks up to date. It will be based upon material that has been accumulated during the last five years, including 160 specimens of Vancouver Island fossils recently received from Mr. Walter Harvey, and about 100 from the Rev. G. W. Taylor, all of which have been examined and studied.

Mollusca from Ungava.

A paper entitled "Notes on some Land and Fresh-water Mollusca from Fort Chimo, Ungava Bay, Ungava," has been prepared and published in the *Ottawa Naturalist* for March, 1901. Another paper entitled "Note on a supposed new species of *Lytoceras* from the Cretaceous rocks at Denman Island, in the Strait of Georgia," has been written and published in the same journal for May, 1901.

Other work.

'At the request of Section IV of the Royal Society of Canada, a Bibliography of Canadian Zoology for the year 1900 has been compiled and presented to the Society, at its last meeting, for publication in its Transactions for 1901.

'A collection of exotic shells has been named for the Museum of Ottawa University and a set of duplicates of recent Canadian marine shells, mostly from the coast of British Columbia, has been selected, labelled and presented to the same museum.

'In all, some thirty-three small collections from various localities, have been examined and reported upon provisionally during the year, and answers, as usual, have been written to many inquiries for information on various palæontological and zoological topics.

'During Dr. Bell's absence in the field for the greater part of August and September, the duties of Acting Director have devolved upon me.'

'The following specimens have been collected by or received from officers of the staff, or employees, during the year 1901 :— Collections by the staff.

Professor Macoun :—

Small collection of snakes and batrachians from south-western Ontario.

Dr. R. W. Ells :—

One hundred and four specimens of fossils from the Trenton limestone at Bear Point, Wolfe island, Ontario.

Hugh Fletcher :—

Fourteen specimens of a graptolite (*Dictyonema Websteri*?) from Silurian slates at Kentville, N.S.

R. J. McConnell :—

Bones and portions of skulls of bison, Rocky Mountain sheep, &c., from the stream gravels on Thistle creek, Yukon territory.

A. P. Low ;—

Two specimens of supposed fossils, from island off Long island, ten miles north of Cape Jones, Labrador.

L. M. Lambe :—

A large collection of remains of dinosaurs, turtles, crocodiles, fishes, primitive mammals, and other vertebrata from the Belly River series of the Red Deer river, Alberta.

W. McInnes :—

Stone adze or scraper from the north side of Lac Seul, Keewatin.

Collections by the staff.

Dr. H. M. Ami :—

About 250 specimens of Trenton and Black River fossils, from the counties of Frontenac, Addington, Prince Edward, Lennox and Hastings, Ont.

Several hundred Pleistocene fossils from various localities in the valleys of the St. Lawrence and Ottawa rivers. Several fragments of pottery from the shore of Lake Ontario, in Prince Edward county.

Twenty specimens of Chazy fossils from Ironsides, P.Q.

R. W. Brock :—

Indian pestle from the north fork of Kettle river, B.C.

D. B. Dowling :—

One hundred and fifty specimens of Silurian fossils from the Equan river, Keewatin.

About twenty-five Pleistocene fossils and twelve fresh water shells from the plateau west of James bay.

Two specimens of mice from the valley of the Equan river.

J. M. Macoun :—

Four hundred and forty-two skins of birds and mammals, and about 300 specimens of fifteen species of reptiles, batrachians, &c., from the Chilliwack river valley, B.C.

W. J. Wilson :—

Twenty-five fossils from the Utica slate at Ottawa.

Fifty-nine arrow heads, adzes, pieces of pottery, &c., from the east end of the portage across the peninsula in Lake Abitibi, five miles east of the outlet of the lake ; and a few fresh water shells from that lake.

W. W. Leach :—

Thirty-six fossils (plants, mollusca, corals, &c.) from various localities and formations in the Crows Nest Pass.

R. A. Daly :—

Sixty fossils from the Chilliwack river valley, Coast Range, B.C.

Fifteen specimens of fossil plants from Sumass mountain, B.C.

J. C. Gwillim :—

Twenty-five specimens of fossiliferous rocks from various localities in Atlin, B.C.

Collections by the staff.

H. S. Poole, Stellarton, N.S. :—

Fifteen specimens of fish teeth, scales, &c., from roof of coal seam at Mill Brook, Fair View, near Dorchester, N.B.

A. McKinnon :—

Two recent marine sponges (*Desmacidon palmatus*) from Cape Blomidon, N.S.

Collections from other sources.

'The additions to the palæontological, geological and ethnological collections during 1901, from other sources, are as follows :—

By presentation :—

(*A.—Palæontology.*)

Mrs. H. A. Nicholson, Aberdeen, Scotland :—

The types of ten species of fossil corals, from the Trenton, Hudson River, Corniferous and Hamilton formations of Ontario, described by the late Professor H. A. Nicholson, with thirteen microscopic sections illustrative of their structure.

Colonel C. C. Grant, Hamilton, Ont. :—

Twenty-five specimens of fossils from the Silurian rocks of Ontario ; six from the Niagara chert at Hamilton, and nineteen from the Hudson River drift at Winona, Ont.

Mrs. Hetherington, Cannamore, Ont. :—

Specimen of a fossil coral (*Columnaria Halli*) from the Birdseye and Black river formation on lot 6, concession X, Finch.

W. S. Odell, Ottawa, Ont. :—

Remains of seal from marine Pleistocene clays near Ottawa.

A. R. Wilson, Fernie, B.C. :—

Fine specimen of a fossil plant from Hosmer, B.C.

Rev. G. W. Taylor, Wellington, B.C. :—

Sixty specimens of Cretaceous fossils, some of them new to science, from Brennan creek, near Wellington, V. I.

Dr. C. F. Newcombe, Victoria, B.C. :—

Specimen of *Turrilites Charlottensis*, shewing the septation which was previously unknown ; and cast of the interior of the dorsal surface of the test of a heart urchin ; both from the Cretaceous rocks of the Queen Charlotte Islands.

Collections from other sources.

T. J. Pollock, Aylmer, P.Q. :—

Small collection of native Pleistocene shells from Aylmer.

W. Milne, Ottawa, Ont. :—

Marine Pleistocene shells from a depth of twenty feet in the main drain, corner of O'Connor and Matchmor streets, Ottawa.

M. P. Davis, Sillery, P.Q. :—

Root of hemlock (*Tsuga Canadensis*) from Pleistocene gravels at Victoria Cove, Sillery, P.Q.

Captain Constantine, N.W.M.P., Dawson, Y.T. (per G. M. Dawson) :—

Fossil plant from near Nulatto, Yukon river.

A. H. Taylor, Ottawa (per Dr. H. M. Ami) :—

Tooth of mammoth from the Pleistocene of the Yukon valley near Dawson, Y.T., collected by Dr. A. M. Taylor.

J. W. Baldwin, Ottawa, Ont. :—

Specimen of trilobite (*Triarthrus*) from the Utica formation at New Edinburgh.

T. C. Weston, Quebec City, P.Q. :—

Two specimens of an *Orthoceras* from the Black River limestone at Lorette falls.

E. W. Kendall, Ottawa, Ont. :—

Twenty specimens of marine Pleistocene fossils, from seven miles north of Morrisburg, Ont.

E. A. Hoare, Quebec City, P.Q. (per Dr. Ami) :—

Series of cores and other drillings from the bed of the St. Lawrence at Victoria Cove, Sillery, on the site of the foundation of the piers of the Quebec bridge.

Frank Burrows, Joggins Mines, N.S. :—

Two pieces of core of a calyx drill, with fossil plants, from Lynx lake, at head of Lingan Basin, just above the coal, in boring made by Mr. Burrows, July 13, 1901.

Small piece of shale, with *Cordaites*, &c., from Buchanan's seam, supposed to be the same rock as the above.

(B.—*Zoology.*)

Collections from other sources.

Zoological specimens.

Dr. R. Bell, Ottawa :—

One specimen each of the Canadian Porcupine, Laughing Goose, Least Rail, Ptarmigan, Bald Eagle (young), Gyrfalcon and Great Horned Owl, from the west coast of Hudson Bay.

Rev. G. W. Taylor, Wellington, V. I. :—

Twenty-nine marine calcareous sponges and one silicious sponge, from Boat Harbour, six miles south of Nanaimo.

Robert Fox, Maxwell's Lake, P.Q. ; per W. L. Marler :—

Two pairs of the Arctic Three-toed Woodpecker ; one pair each of the Pine Grosbeak, Northern Shrike, and white-bellied Nuthatch ; and one specimen of the Pileated Woodpecker.

S. E. Wilson, Cascades, P.Q. :—

Star-nose Mole (*Condylura cristata*), from the Cascades.

J. E. Keays, London, Ont. :—

Set of three eggs of the Red-shouldered Hawk (*Buteo lineatus*), from near London.

Rev. C. J. Young, Sharbot Lake, Ont. :—

Set of three eggs of the Red-shouldered Hawk, from Leeds Co., Ont.

H. H. Ross, Medicine Hat, Assa. :—

Horned Toad (*Phrynosoma Douglasii*), from Medicine Hat.

Edwin Beaupré, Kingston, Ont. :—

Set of four eggs of the Swamp Sparrow (*Melospiza Georgiana*) with one Cowbird's egg,—from the Cataraqui Marsh near Kingston.

E. J. Chamberlin, Ottawa :—

Fine specimen of head of Moose (mounted) with abnormal antlers.

V. V. Rogers, Ottawa :—

Young loon and fine male Canvas-back Duck (*Aythya vallisneria*), both shot at Stanley Island, St. Lawrence River.

Messrs. McDougall and Secord, Edmonton, N.W.T. ; per the Hon. Clifford Sifton :—

Two skins of the Arctic Fox.

Collections from other sources.

Lawrence W. Watson, Charlottetown, P.E.I. :—

Specimen each of the Black Hare and Grey Hare from Prince Edward Island.

W. M. Antiss, Ottawa :—

Specimen of Brunnich's Murre, shot near Ottawa.

(C.—*Archæology.*)

Archœological specimens.

F. Dunn, Barry's Bay, Ont. ; per Dr. A. E. Barlow :—

Four stone implements from Welshmans Island, Barry's Bay, Renfrew Co., Ont.

W. E. Calvert, Ottawa :—

Stone gouge found on Elgin st., near Pattersons Creek, August, 1884.

Mrs. M. Deane-Freeman, McLeod, Alberta :—

Two 'buffalo stones,' very scarce and held in great reverence by the aborigines from the Blood Reservation at Fort McLeod.

ARTESIAN WELLS, PALÆONTOLOGY, ARCHÆOLOGY, BIBLIOGRAPHIES, ETC.

Work by Dr. H. M. Ami.

Dr. H. M. Ami reports as follows:—'During the earlier part of the year much of my time was spent in office work: determining various collections of fossils from different provinces obtained by officers of the staff and others, with a view to ascertaining the precise geological horizon or formation to which they should be assigned.

'Examinations were made of numerous samples of drillings and cores from wells sunk at various localities in Ontario and Quebec. Sections were prepared in some instances from these logs, giving the order of succession of the strata traversed and the geological formations represented. The wells were for the most part bored for petroleum, natural gas, salt or water.

Well at Ramsay's corners.

'From lot 18, con. VII, township of Gloucester, county of Carleton, numerous specimens of the core of a diamond drill in "Well No. 1," near Ramsays Corners, were sent to the department for examination. The Pleistocene formation in the district reached a thickness of 204

feet, while the Lorraine formation, consisting of fine-grained silicious mudstones and shales with here and there a thin calcareous band, was found to be much thicker than shown in any previous records in the department. Notes on the fossils detected in the cores of drillings at different depths were kept and afforded satisfactory evidence upon which to determine the age and position of the strata traversed. Well No. 1 reached a depth of 469 feet, whilst well No. 2, on lot 8, con. V, Rideau front, in the township of Gloucester, was drilled to a depth of 460 feet, and the Utica formation, consisting of black bituminous shales, was satisfactorily recognized. An estimate of the probable thickness of the Palæozoic sediments in this vicinity gave 1,540 feet.

Well four miles east of St. Gregoire.

'Notes on a series of drillings from a deep well on Concession Pointu, four miles east of St. Gregoire, township of Becancour, Que., were recorded, and a section giving the succession of strata at various depths prepared from the materials sent from the well in which it was reported that a bed of salt, fifty feet in thickness occurred. No evidence of the salt rock was found. The drillings consisted, for the most part, of fine-grained red silicious mud, representing the Medina formation, or lowest division of the Silurian system in that district.

Microscopic sections.

'Microscopic sections, numbered 2,211 to 2,215, were prepared from small chips of rock occurring in the drillings sent to the Geological Survey for examination from the depths of 1,632½ and 1,635 feet respectively in the well at Hepworth, Ontario. Dr. Barlow, to whom these micro-sections were submitted, describes the rock as "grit, chloritic and kaolin material, fine-grained limestone or dolomite, and arkose." This rock resembles in character the basal series of strata underlying the Black river formation throughout central Ontario or lying between that formation and the uneven rounded and worn surfaces of the Archæan below.

'During the drilling for water on the property of the Ottawa Produce Company in Nicholas street, in Ottawa city, where the surface rock, only a few feet below the level of the street, consists of the upper beds of the Trenton formation, water rising to the surface was struck in abundance. It was ascertained that the well was put down in a direction in line with the strike of the folded strata which may be seen at the south-western slope and base of Nepean point, Ottawa.'

Assist Dr. Ells.

At the end of July Dr. Ami was instructed to proceed to Kingston and vicinity in order to assist Dr. Ells in determining in the field the age of some of the rocks, from the palæontological evidence, and thirteen days were spent on this work.

Some obscure fossils obtained by Mr. Gwillim at three localities in the Atlin gold district in British Columbia, were examined by Dr. Ami and subsequently by Dr. T. W. Stanton, of the United States Geological Survey, who furnished a few notes on them for Mr. Gwillim's report.

'Amongst the collections obtained during the past season are two specimens of a core of a calyx-drill from Lynx lake at the head of the Lingan basin, just above the coal and 21 feet down in a boring made by Mr. Fraser Burrows. They exhibit three well-known species of fossil plants, characteristic of coal-bearing strata: *Sphenophyllum cuneatum*, *Alethopteris Serlii* and a *Cardiopteris*.

Collections recorded.

'Records of all the additions to the ethnological and archæological collections have been made and the specimens catalogued. Records of additions to the palæontological collections in the Museum were also kept, as well as a list of additions to the series of sections for the microscope. Amongst the latter is a series of foraminifera, &c., from boulder clays (glacial?) collected by Dr. Dawson and other officers of the Survey in different portions of Canada. These minute organisms are of value in ascertaining the origin of the boulder clays of the North-west Territories. They were mounted by Joseph Wright, Esq., of 4 Alfred St., Belfast, Ireland, to whom the department is under special obligations for their determination and identification.

'Micro-sections of Prof. D. P. Penhallow's new species of larch from the Churchbridge well, Manitoba, at the depth of 200 feet in the Pleistocene of that province, were received and recorded. The specimens from which this species was described were collected by Messrs. J. B. Tyrrell and G. H. Webster in 1892.

Loan of specimens.

'As mentioned in last year's Summary, through the kindness of the authorities of the American Museum of Natural History, New York city, this Department has been lent, in order to study and re-figure, if necessary, the original types of certain species of Silurian fossils from the Arisaig coast of Antigonish, Nova Scotia. The first consignment of these fossils has been studied and drawn preparatory to their return to the Central Park Museum. The examination of these types throws much light upon difficult questions in nomenclature and classification which have arisen in the study of Silurian faunas from Stonehouse, Moydart, McAdam and Arisaig. From the light yellow or buff weathering fossiliferous sandstones, &c., of the Arisaig rocks, as described on page 180 of the Summary Report for 1900, the 'interstratified bands of shale,' &c., mentioned, must be eliminated from the arenaceous series. These strata are highly disturbed and may consti-

tute a separate or distinct series whose relations and age require to be examined more critically before a definite conclusion may be reached.

'Further studies have been made on additional specimens of the genus *Dictyonema* from different localities in Nova Scotia and New Brunswick. Specimens of *Dictyonema Websteri* from the highly inclined and cleaved red and green shales of King's county, Nova Scotia, have also been studied and notes made upon them.

'Synopses of Canadian palæontological publications have been prepared for the 'Geologische Centralblatt,' at the request of Dr. K. Keilhack, Director of the Geological Survey of Germany, &c., and in accordance with instructions received from the late Dr. G. M. Dawson.

Swing's collections in Peter Redpath Museum.

'At the time of Sir J. W. Dawson's death, a number of collections of fossil plants were in his hands and these are now awaiting determination in the Peter Redpath Museum. These collections are as follows : Fossil leaves and other plant remains from the Red Deer and Blind Man rivers ; fossil plants from Port McNeil, British Columbia ; fossil plants from various localities in the Queen Charlotte Islands ; plant remains from Lytton, B.C., collected by the late Dr. G. M. Dawson ; specimens of fossil ferns from Skidegate Inlet, Queen Charlotte Islands, collected by the late Dr. G. M. Dawson and recently described in MS. by Prof. Penhallow as a species of *Osmundites*.

Fossils donated.

'During the past year, a small collection of fossils was selected and sent to the Museum of King's College, Windsor, Nova Scotia, from amongst the duplicate specimens in the Museum, and a collection of about 150 specimens of fossils from the geological formations of the Ottawa district was determined and sent to Prof. H. S. Poole, of Dalhousie University, Halifax, N.S.

In the same period the following papers were published :—

Papers published.

'Preliminary lists of the organic remains occurring in the various geological formations comprised in the map of the Ottawa district, including portions of provinces of Qnebec and Ontario, along the Ottawa river.' Published as an appendix to Dr. Ells' report on the Geology of the Ottawa City map.

'Preliminary lists of the organic remains occurrring within the area comprised in the Grenville map sheet.' Prepared as an appendix to Dr. Ells' Report.

'On the Geology of the Principal Cities in Eastern Canada.' containing descriptions of the various systems, formations, characteristics fossils, etc., arranged in tabular form for the cities of

St. John, Quebec, Montreal, Ottawa and Toronto. Trans. Royal Society of Canada, 2nd series, Vol. 6, Sec. IV, pp. 125–173.

'On a new or hitherto unrecognized geological formation in the Devonian system of Canada.' Published in the Canadian Record of Science, Vol. 8, No. 5, pp. 296–305, January, 1901.

'Knoydart Formation of Nova Scotia.' (Read before the Geological Society of America, Albany, N.Y.) Published in Bull. Geological Society America, Vol. 12, pp. 301–312, Pl. 26, August, 1901, Rochester, N.Y.

'Description of new tracks or trails made by some fish-like organism from the fine-grained silicious mudstones of Antigonish county, Nova Scotia.' Read before the Nova Scotia Institute of Science, May 13, 1901, and printed in Proc. and Trans. Nova Scotia Inst. Sc., Halifax. (Session 1900–1901.)

'Stratigraphical Note,' containing subdivisions of the Devonian and Silurian of the Arisaig region of Nova Scotia. Published in Science, new series, Vol. 13, No. 323, pp. 394–395, March, 1901.

'Notice of Prof. E. D. Cope's article on Cyphornis, an extinct genus of birds.' Published in Canadian Record of Science, Vol. 8, No. 5, pp. 331–332, January, 1901, Montreal.

'Brief Biographical Sketch of Elkanah Billings,' Palæontologist to the Geological Survey of Canada from 1856–1876. Published in the American Geologist, Vol. 27, No. 5, pp. 265–281, May, 1901, Minneapolis, Minn.

'A biographical sketch of George Mercer Dawson.' Published in the Ottawa Naturalist, Vol. 15, No. 2, pp. 43–52, May, 1901, followed by 'Bibliography of Dr. George M. Dawson,' Vol. 15, No. 9, pp. 201–213, December, 1901.

'Besides the above, part of the manuscript of a list of the fossils of the Grand Manitoulin and adjoining islands has been prepared. This report is the result of a study of the palæontological literature of these islands and includes determinations by the late E. Billings, J. J. Bigsby, G. Stokes, Baron de Castelnau, the writer and others. When completed it will form an appendix to Dr. R. Bell's report on the Geology of the Manitoulin Islands now in course of preparation.

Mining Institute.

'At the March meeting of the 'Canadian Mining Institute,' held in Montreal, the following paper was read: 'On the succession and thickness of the geological formations in the gas and oil-fields of Ontario.' The subject-matter in this paper is being embodied in a report for

the Department on the gas and oil wells of Ontario and Quebec. At the same meeting, at the request of the executive of the Mining Institute, I prepared and read a biographical notice of the late Dr. G. M. Dawson. A Bibliography of Canadian Geology and Palæontology during the year 1900, was prepared for the Transactions of the Royal Society of Canada. I have also supervised the preparation of the manuscript of the Index to Canadian Geology and Palæontology from my card catalogue of the Bibliography of Canadian Geology, &c. The bibliographies of the following writers have already been prepared :— Sir William E. Logan, Sir Richard Owen, Sir J. William Dawson, Dr. T. Sterry Hunt, Elkanah Billings, C. Fred Hartt, L. W. Bailey, S. H. Scudder, Dr. G. M. Dawson, H. M. Ami.

Pleistocene geology and artesian wells.

Dr. Ami having already paid some attention to the Pleistocene geology of the province of Quebec and the valley of the Ottawa river, and also to the collecting of logs of artesian wells, he was given the following instructions. Shortly after receiving them, however, he was sent, at the request of Dr. Ells (as mentioned on a previous page) to assist him palæontologically in his work in the district around Kingston. Thirteen days of his time were devoted to that work.

In order to do thoroughly the Pleistocene geology of the areas mentioned in Dr. Ami's instructions, the time of one man for more than a single season might be profitably spent and it was explained to him verbally that he would only be expected to do what he could to obtain as much new information as possible to add to what we already knew of this interesting subject in the region west of the city of Quebec, described in his instructions.

INSTRUCTIONS.

OTTAWA, July 13, 1901.

Instructions.

DEAR DR. AMI.—In the month of April, I mentionned to you that I wished you to make certain original investigations in the field in two departments of geology which I knew were congenial to your taste and inclination, viz: (1) in connection with the pleistocene geology of part of the province of Quebec and part of the Ottawa valley, and (2) to collect in the same regions the records of artesian wells bored into the solid rocks in search of water, etc.

The general nature and the main divisions of the superficial deposits of the province of Quebec are described in the Geology of Canada, 1863. Since that time geologists have been paying much attention to pleistocene geology and it has now become very desirable that we

should make a more systematic and complete investigation of these deposits than has hitherto been attempted.

Instructions to Dr. Ami.

For this purpose, I wish you to work in the field during the present season on this subject and that of the artesian wells referred to. The territory you are to examine extends from the city of Quebec up the River St. Lawrence to Lake St. Francis (where the boundary of Ontario comes to the water) and on either side of the river as far as the high lands which limit the area of the Saxicava sands to the north-east and the south-west. Try to map out in more detail than has heretofore been done, the geographical distribution of this formation and also of the underlying Leda clay. Also try to ascertain the thickness of each formation at as many localities as possible. Visit such localities as you may think likely to prove of particular interest as to these or other superficial formations and make such investigations as will enable you to describe correctly the phenomena observed. Note the names of all the species wherever you may observe the occurrence of organic remains in any of the surface deposits.

Your work in the Ottawa valley will extend from the mouth of the river as far west as Mattawa and will be mainly on the south side, extending to the general line of the height of land of the St. Lawrence. Here the Leda clay and Saxicava sand will also claim your attention with the same objects as in the St. Lawrence valley. The work you have already done in this district, especially in connection with the organic remains at Green's Creek, etc., will be of much service to enable you to prepare as full a report as possible on the whole subject.

In both the St. Lawrence and Ottawa regions you will also investigate ancient glacial phenomena and all the evidence connected with moraines, boulders, drumlins, kames, osars, sand or gravel plains, old or new land slides, ancient potholes, etc.

Wherever you find distinct evidence of ancient shore lines, take their altitude above the sea or some well-established bench-mark, or water level. As to boulders, note the general size prevailing at any given place, whether angular, sub-angular or rounded, composition or character, how grouped or arranged or occurring.

Note what has been ascertained by experience as to the value or otherwise of clays in different places for the manufacture of brick, pottery, tiles, etc.

Ascertain as much as possible as to peat—the areas, position of boundaries all around the bog, depth, quantity, former attempts to manufacture or use, reasons of failure, suggestions for further trials, etc.

Particulars should be noted as to shell-marl, infusorial earth, ochre, bog iron, sand for moulding, glass-making and any other substance that may be of value.

Collect as much information as possible in regard to springs, wells and underground waters generally among the superficial deposits.

(2.) *Artesian wells.*

As to this second division of your work, try to ascertain where any artesian well has been or is being bored. In each case obtain the best possible 'log,' together with samples of the cores or drillings. Where no regular or systematic 'log' of the well has been preserved, try to ascertain any facts you can about it from the most reliable source, such as date of boring, by whom bored, total depth, general character or rocks penetrated, or any peculiarity connected with them, such as the quantity of water obtained, whether saline, bitter, hard, soft, etc. Inquire as to any indications of gas or petroleum.

The above will provide an ample field and amount of work for your energies for one season without going to Gaspé, about which you spoke. I expect to be able to obtain 'logs' of the wells which have been bored in this district from another source and you will therefore not proceed to that part of the province.

Yours faithfully,

ROBERT BELL,
Acting Director.

H. M. Ami, Esq., F.R.S.C., &c.,
Geological Survey,
Ottawa.

Entomology.

Dr. James Fletcher.

Report of the Entomologist.

Dr. James Fletcher, Entomologist and Botanist to the Dominion Experimental Farms, as Honorary Curator of the entomological collection in the museum of the department, furnishes the following report:—

I have the honour to report that the entomological collections are all in good condition. A few additions have been made, mainly from

my own collection. The most important of these is a specimen of the very rare *Erebia Vidleri*, Elwes. Three specimens of this butterfly were discovered over thirty years ago somewhere in the mountains of British Columbia by a Capt. Vidler, but nothing was known as to the locality and date. In 1898, on August 15, I was fortunate enough to rediscover the species on Mount Ché-am, near to Agassiz, in the valley of the Fraser. Three specimens were taken, one of which I have had pleasure in depositing in the National Museum. Very few additions have come from the collections made by the field staff of the Geological Survey.

Collections received.

1. I have received one small collection made by Mr. William McInnes around the Lake of the Woods in the autumn of 1899. These were chiefly lepidoptera which had been already recorded from that district.

2. A small but exceedingly interesting collection was handed to me by Prof. John Macoun for naming, made on Telon river in June and July, 1900. These specimens bore on the labels 'J. L.' but Prof. Macoun tells me that they were collected by Mr. Tyrrell. In this collection I found one specimen of the rare Arctic butterfly *Erebia Rossi*, Kirby, of which previously we had no specimen in the collection. There were other species in this collection which will be of use for the cabinets, but which were in rather poor condition.

3. A collection of lepidoptera, coleoptera and neuroptera, made by Mr. James Macoun in June, July and August, 1901, along the Chilliwack river and at Sumass lake, in British Columbia. In this collection was one much damaged specimen of the rare *Erebia Vidleri*, above referred to, taken at 6,000 feet elevation in the Ché-nm mountains. These are the only localities so far known for this insect. Among the beetles the best addition to the museum was *Pachyta armata*, Lec., a rare and handsome carambycid.

Utility of collecting.

May I again ask you to urge upon the members of the staff the value to the museum of collections of insects, however small these may be, when exact dates and localities are given. As I have pointed out previously, if each party would bring back only half a dozen specimens, there would doubtless be included in these every year valuable additions to the national collection. Every specimen placed in the cabinets bears the collector's name and the locality and date of capture. Full credit is also given every year in the report, and complete lists are kept with the idea at some future time of publishing a systematic catalogue of the insects of Canada, similar to Prof. Macoun's invaluable catalogues of plants and birds.

I am quite aware that the officers of the Geological Survey have a great deal to do when in the field and that they have not many facilities for collecting and caring for such delicate specimens as insects, but their opportunities are so exceptional and such good work has already been done by a few, such as yourself, Dr. Geo. Dawson, Messrs. John and J. M. Macoun, W. McInnes, A. P. Low and J. McEvoy, that in the hope of inducing others to do work of a similar nature I beg to request you to ask all members of the Geological Survey staff working in the field in new localities to make an effort to bring home with them at least a few specimens every year. No matter what these may be, there is sure to be something among them that is desirable, and which will add, not only to the museum collection, but to the known facts with regard to many species of economic and scientific importance. I would specially request that attention be paid to the insects which injure forest trees, and, in conclusion, I would point out that great care should be taken in labelling every specimen with the locality and the date of capture. Lepidoptera, neuroptera and hymenoptera may be placed in envelopes, one specimen in each; specimens of orthoptera should each be rolled in paper, and coleoptera may be placed in bottles among sawdust slightly dampened with alcohol. The label for these should be written in pencil on paper and placed inside the bottle with the specimens.

Exceptional opportunities.

Insects injurious to trees.

The Library.

Dr. John Thorburn.

During the ten months from January 2, to October 31, 1901, there have been distributed 8,305 publications of the Geological Survey, comprising reports, parts of reports, special reports and maps. Of these 4,364 were distributed in Canada; the remainder, 3,941, were sent to foreign countries as exchanges to universities, scientific and literary institutions and to a number of individuals engaged in scientific pursuits. Due care has been exercised in the distribution of our publications, inasmuch as if all the applications were granted, the supply which is limited would soon be exhausted. A large number of the earlier reports and maps are now out of print, and can no longer be supplied.

Distribution of publications.

The sales of publications during the above period, including reports and maps numbered 3,117; the amount received for these being $530.45.

There were received, as donations or exchanges 2,427 publications, including reports, transactions, proceedings, memoirs, periodicals,

Donations received.

pamphlets and maps; besides which twenty-seven publications were purchased and thirty-seven scientific periodicals were subscribed for.

The number of volumes bound was 120.

Letters. The letters received in connection with the library numbered 967, besides 744 acknowledgments for publications sent out.

The number of letters sent out from the library was 969, besides 521 acknowledgments for exchanges and to persons from whom publications were received.

Volumes in library. There are now in the library by actual count 12,706 volumes, besides a large and valuable collection of pamphlets.

As has been frequently stated in former reports, the space available for library purposes is altogether insufficient. The cases are filled and a large number of books are piled up on the floor of the library and in other parts of the building, and consequently, it is often difficult to find books which are required for consultation by members of the staff.

It may be stated that books in the library are available for consultation by persons wishing to obtain information in regard to any scientific subject.

Visitors to the Museum.

Visitors to the Museum. The number of visitors to the museum who signed their names, was 37,895 during the calendar year 1901, being an increase of 1,804 over the previous year, but a large percentage of the visitors do not take the trouble to register.

Staff, Appropriation, Expenditure and Correspondence.

taff, etc. The strength of the staff at present employed is fifty-four.

During the year changes in the staff have taken place by the death of Dr. G. M. Dawson, Deputy Head and Director, and by the resignation of Messrs. J. C. Gwillim, A. P. Low and James McEvoy.

Messrs. W. W. Leach and Jos. Keele, science graduates, were appointed to the positions rendered vacant by Messrs. McEvoy and Gwillim.

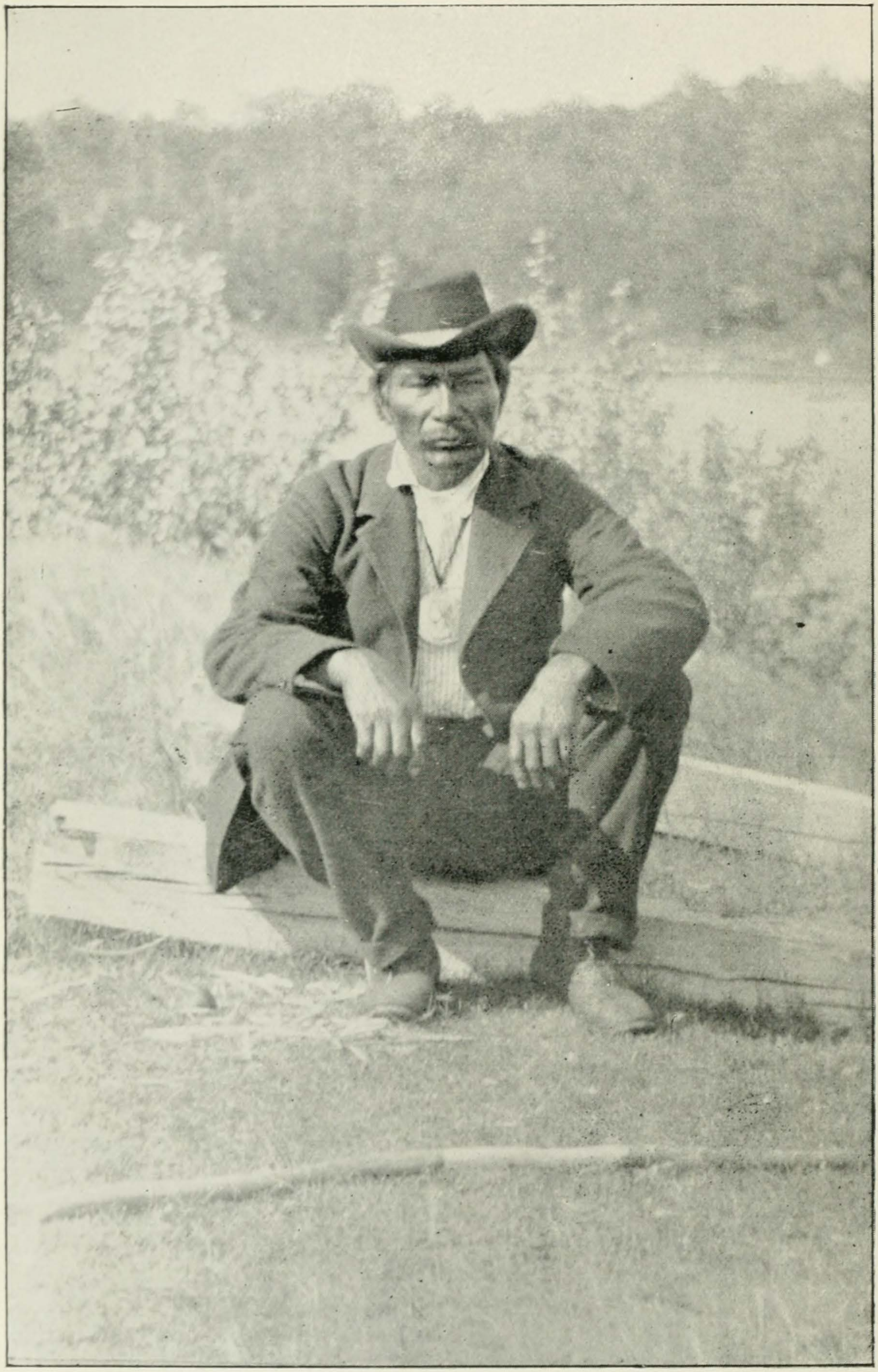
The funds available for the work and the expenditure of the department during the fiscal year ending June 30, 1901, were :—

Details.	Grant.	Expend'ure.
	$ cts.	$ cts.
Civil-list appropriation	53,900 00	
Geological Survey appropriation	62,000 00	
Civil-list salaries		51,436 14
Exploration and survey		21,724 86
Wages of temporary employees		16,952 32
Printing and lithography		13,276 84
Purchase of books and instruments		1,307 58
" chemical apparatus		133 38
" specimens		91 60
Stationery, mapping materials and King's Printer		1,459 19
Incidental and other expenses		2,299 26
Advances to explorers on account of 1901–02		14,234 27
		122,915 44
Deduct, paid in 1899–1900 on account of 1900–01		9,537 80
		113,377 64
Unexpended balance civil-list appropriation		2,463 86
" " survey "		58 50
	115,900 00	115,900 00

The correspondence of the department shows a total of 6,822 letters sent, and 7,110 received.

I have the honour to be, sir,
Your obedient servant,

ROBERT BELL,
Acting Deputy Head and Director.



Chief Richard Woodhouse (wiem hedal), Fairford Reserve, Man.

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE

YEAR ENDED JUNE 30

1901

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1901

[No. 27—1902]

To His Excellency the Right Honourable the Earl of Minto, Governor General of Canada, &c., &c., &c.

MAY IT PLEASE YOUR EXCELLENCY:—

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Indian Affairs for the fiscal year ended June 30, 1901.

Respectfully submitted,

CLIFFORD SIFTON,

Superintendent General of Indian Affairs.

OTTAWA, Dec. 12, 1901.

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REPORT

OF THE

DEPARTMENT OF INDIAN AFFAIRS

FOR THE YEAR ENDED JUNE 30, 1901

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, December 12, 1901.

To the Honourable Clifford Sifton,
Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the report of the Department of Indian Affairs for the fiscal year ended June 30, 1901.

In looking over the work performed and the results obtained during the period mentioned, it will be seen that the Indians throughout Canada not only continue, on the whole, to be law-abiding and contented, but they would appear to be more self-supporting as they increase in numbers, and those engaged in agriculture are adopting the same methods as their white brethren, with very pleasing results.

The main features of the policy followed by the department in this relation, which, it may be observed, have been recognized by the imperial, provincial and Dominion governments in succession as being essential for the advancement of the Indians, are the fixity of their abode; the careful safeguarding of their interests with respect to the alienation or sale of their lands; their individual and direct responsibility to the Crown, the enactment of special legislation for their protection against their own weaknesses, or aggression on the part of the stronger race, with a view to their eventually assuming the responsibilities of citizenship ; the granting of all necessary educational facilities, and limiting such material assistance as may be offered to the needy to what may tend to make them self-supporting.

The various reports and statistical statements herewith submitted would appear to show that the policy above outlined has, on the whole, fulfilled its intention. Although local conditions in certain cases may justify a departure from the rules governing its application, the general results obtained have been such as to warrant the continuance of practically the same mode of dealing with the Indians during the present year.

Although a matter with which the government has not been directly concerned, it should be pointed out that there has probably been no more potent factor in the elevation of the Indians than the religious instruction afforded them by the missionaries of the various churches, who have been and still are devotedly working to inculcate the principles of Christianity amongst these people, and who moreover largely cooperate in the work of their secular education.

While the progress among Indians is necessarily of a slow and gradual character, which renders it difficult to observe any tangible improvement within the limits of a year, it is gratifying to note that the Indians under the supervision of the department are showing increased providence of habits and greater self-reliance.

Health.

In so far as concerned the health of the Indians, the year has been one of considerable anxiety to the department, due to the prevalence of small-pox, which without having reached the epidemic stage in any district was sufficiently prevalent among white communities and the Indians of the United States along the boundary line, with whom our Indians are in habitual contact, as to have constituted a serious menace. This anxiety has been aggravated by the recollection of the fearful ravages of the disease on the occasions upon which it attacked the Indians in years gone by, and it was impossible to avoid grave concern until the possibility of coping with such a situation under the conditions existing to-day should have been demonstrated experimentally. Although the type has fortunately been so far a very mild one, there was none the less the consciousness that it might at any time assume a more malignant form, and that there is much in the personal habits and other conditions of many of the Indians to encourage such development were a lodgment once effected.

In so far as the department's information goes to show, the Caughnawaga reserve was the only one in the province of Quebec where the disease made its appearance, and there it was confined to a solitary case.

In Ontario there were some nineteen cases at Whitefish Lake reserve, in the somewhat badly affected neighbourhood of Sudbury, and some thirty-three cases on the Six Nations' reserve.

In Manitoba, the disease broke out on one reserve in the Birtle agency, and in the Northwest Territories, in one family in the Pelly agency, also among some bands in the Touchwood Hills, Edmonton, Hobbema, Saddle Lake, and Onion Lake agencies.

In British Columbia some few cases occurred at Quesnel in the Williams Lake agency. The infection was brought in May last by a family from Alaska to Kincolith where one family and a single woman were attacked, the latter carrying it to Skeena river where some three thousand Indians were assembled, but by prompt and vigorous measures the number of cases was confined to fourteen and by the end of June the disease was stamped out.

In all the localities mentioned the type was mild and but one or two fatalities resulted.

The immunity enjoyed by the Indians as a whole may doubtless be attributed in no small degree to the systematic vaccination practised as far as possible by the department for many years past; and the alacrity manifested by those who had hitherto evaded or resisted the operation, to avail themselves of it in the immediate presence of danger, shows that their objection to it was not founded upon ignorance of its value, but rather the outcome of that peculiarity of their constitution which renders it so difficult to induce them to look to any length ahead.

Of other forms of disease prone to become epidemic there has not been much during the year. Measles were more or less prevalent among the following Indians, viz.: in Ontario among those on two reserves in the Port Arthur district and the Mohawks of the Bay of Quinté ; in Quebec, at Temiscaming and among the Micmacs of Maria, also among members of the same tribe in New Brunswick, and in Colchester county, Nova Scotia ; in Manitoba on some reserves in the Rat Portage district ; in the Northwest Territories on the reserves at Pelly and Qu'Appelle, and in British Columbia at Bute Inlet and the Malaspina Straits in the Fraser River agency.

In some of the localities mentioned the disease was of a somewhat severe type and a good many deaths ensued, principally among children, although there were some fatalities among adults whose constitutions, weakened from various causes, could not successfully resist attack. As usual with this disease among Indians more harm resulted from carelessness when convalescing than from direct attack. Grippe, which has proved peculiarly disastrous because of the prevailing tendency to pulmonary affections, has largely disappeared.

In the province of Quebec the same Indians as already stated to have been attacked by measles, viz., those at Temiscaming and Maria, were visited by grippe in a rather severe form, and it dealt somewhat hardly with the Peigans in the Northwest Territories, as also with some of the bands in the Williams Lake agency in British Columbia.

In the Kootenay district in the same province and in the Rat Portage district it was more or less epidemic, but fortunately assumed a milder character, especially in the former.

With the exception of a mild outbreak of chicken-pox at Berens River no other epidemics have been reported.

As usual a large proportion of deaths must be attributed directly or can be traced to scrofula and pulmonary troubles, and consequently apart from epidemics, the average of health depends greatly on the character of the winter, which last year was somewhat too mild and changeable to have been very favourable to the Indians, although on the whole, and remembering averted danger, there has been much cause for thankfulness.

VITAL STATISTICS.

	Births.	Deaths.	Gains.
Ontario	499	465	34
Quebec	223	164	59
Nova Scotia	69	55	14
New Brunswick	44	34	10
P. E. Island	15	7	8
British Columbia	777	727	50
Manitoba	291	250	41
N. W. Territoires	561	538	23
	2,479	2,240	239

The foregoing table shows that the birth has exceeded the death rate by 239.

Last year 2,333 births and 2,557 deaths occurred, so that as compared with it, there has been an increase during the year under review of 146 in the number of births and a decrease of 317 in that of deaths.

A very gratifying feature of this increase is that is has not been confined to any particular province, but proportionately distributed throughout the Dominion.

POPULATION.

	1900.	1901.	Increase.
Ontario	20,703	20,763	60
Quebec	10,785	10,865	80
Nova Scotia	2,018	2,020	2
New Brunswick	1,639	1,655	16
P. E. Island	308	315	7
British Columbia	24,523	24,576	53
Manitoba	6,754	6,840	86
N. W. Territories	17,714	17,927	213
Outside Treaty Limits	14,566	14,566	....
	99,010	99,527	517

It will be observed from the foregoing comparative statement that as compared with the preceding year there has been an aggregate increase of 517 in the whole Indian population within treaty limits.

The difference between that number and 239 shown to have been gained by excess of births over deaths, is accounted for by fresh adhesions to Treaty No. 8 and other local fluctuations. No fresh statistics have been received since last year relative to Indians outside treaty limits, and the number, which at best is only more or less approximate, has been carried forward without any change.

Agriculture.

The past year cannot be said to have been a very favourable one on the whole for the farming community, although there has not been much cause for complaint in the older provinces.

In Ontario crops were, generally speaking, fairly good average, but turned out light in places from insufficiency of moisture ; while fall wheat was appreciably damaged by the ravages of the Hessian fly.

Mention was made last year of a new enterprise having been started tentatively at Walpole Island, viz., the growing of sugar beets, and it is gratifying to be able to report that it has so far proved a great success and that there seems to be an immediate prospect of its being taken hold of by the Indians at Cape Croker, who are within range of a recently established sugar factory.

The farmers in this province manifest a laudable desire to adopt the most approved agricultural methods, and such work as fencing, draining and other improvements are quietly going on through the reserves, and are stimulated by the spirit of emulation engendered by competition at the fairs or exhibitions which some of the most progressive bands hold among themselves.

In the province of Quebec appreciable advancement in the direction of clearing and cultivation has been noticed on the reserves at River Desert, Lake St. John, and among the Algonquins of the Lake of Two Mountains, and fair general progress at St. Regis and Restigouche ; but otherwise throughout the province the prevailing lack of interest in, if not pronounced distate for, agricultural pursuits remains unchanged. Crops yielded fairly well, although in the eastern section they were somewhat damaged by excessive moisture.

In the maritime provinces although some few make agriculture their main-stay, and others depend upon it more or less, the majority do not much concern themselves about it, and confine their efforts to the cultivation of patches of potatoes and vegetables, together with a few oats and a little buckwheat.

In the Rat Portage district and farther west in Manitoba to the south and southeast of Lake Winnipeg, as well as in the district of Portage la Prairie, long continued drought during the early part of the season followed by prolonged rain-fall affected the crops injuriously.

In the Pas district, the flooded condition of the country curtailed the small areas at any time available for agricultural purposes, and the Indians had to reduce the patches of potatoes which they are in the habit of cultivating.

In the Northwest Territories generally the same conditions prevailed, with the result that the crops on many of the reserves failed to mature or could not be harvested in good condition.

The reserves at File Hills and in the Prince Albert and Battleford districts were more fortunate, the first mentioned having been favoured with excellent and the latter with fairly good yields.

Scarcity of produce naturally tends to create high prices, and such Indians as had any to dispose of did well, while the less fortunate as a reward for their courage in going to work again last spring despite the disappointment just referred to, have enjoyed their full share of the bountiful harvest which has just been reaped in Manitoba and the Northwest Territories within the calendar year although outside of the limits of the fiscal year now under review.

In Treaty No. 7, where climatic conditions have dictated the abandonment of the effort to cultivate cereals, little beyond potatoes is raised, but they turned out a fair success.

In British Columbia the returns of grain were by no means unsatisfactory, although in parts the rain interfered with harvesting.

In the Fraser River, Williams Lake, Kootenay and Cowichan agencies, the Indians, many of whom depend a good deal upon the potatoes and garden stuffs to which they confine their efforts at cultivation, suffered somewhat severe loss from the ravages of the cut or army worm.

Live Stock.

In connection with their agricultural operations the majority of farming Indians depend more or less upon stock-rasing, and in some districts in the younger provinces, where growth of cereals is precarious, or where the reserves are unfavourably situated with regard to a market for grain, place their main reliance on their herds of cattle.

The number kept is regulated by the facilities for securing the wild grass upon which they almost entirely depend to provide the very considerable quantities of hay required to feed the large herds of stock through the winter season. Many bands now possess the full quota of cattle which the available supply of grass renders it prudent to encourage them to keep, and consequently it becomes a serious matter when anything occurs to interfere with the necessary supply of hay.

Unfortunately the conditions already described as having proved so unfavourable for the maturing and harvesting of crops in certain districts greatly hampered the efforts of the Indians to secure a sufficient quantity of hay. The continuous rainfall not only seriously impeded the Indians in their efforts to secure grass, but also in their efforts to cure what they succeeded in cutting, and under the circumstances it speaks very well for them that they managed to put up fully as much as they did the preceding year, the supply for which was, however, rather short from somewhat similar causes, although such unfavourable conditions rarely prevail and still less frequently for two years in succession.

Hay cured under such conditions could not fail to prove of poor quality, but fortunately the season permitted of the cattle grazing out longer than usual, so that by the husbanding and utilizing of all available straw, the cattle were brought through without any serious loss and quite as well as those of the settlers in the same localities.

In Treaty No. 7 in the Northwest Territories on the reserves which are within the ranching districts, where cattle feed out during the winter, the earlier part of the

season proved very favourable, as there was but slight snow-fall, and open water. Later on, however, the weather became somewhat too changeable, a condition which tends to make the grass musty and moreover difficult of access by the cattle on account of the formation of a hard crust on the surface of the snow caused by alternate thawing and freezing.

In this treaty, stock-raising seems destined to become one of the main supports of the Indians, and to this fact they are fast awakening in increasing numbers.

On the Blood reserve the addition of twenty-two in the course of the year brought the number of cattle-holders up to one hundred and twenty-three, who have within a few of two thousand head.

The neighbouring Peigans have doubled the number of their herd during the last three years, notwithstanding the fact that during that period two hundred and seventy animals have been beefed, and it now stands at something over one thousand two hundred head.

The prejudice of these Indians to cattle was largely instilled by Crowfoot, the head chief of the Blackfoot nation, and survived his death, which occurred in 1890. He always impressed upon his people that their acceptance of cattle would be the precursor of the closing of the government's ration-house ; but in view of the great influence exerted by him for good and the assistance given by him to the department in dealing with his people, who comprised the most warlike tribes and who from their situation close to the boundary line, and intimate relationship with tribes on the other side, might under different leadership have caused endless trouble, his memory need not be held in less esteem, because on first contact with civilization, he failed to grasp what it has required so many years of education to bring the most progressive of his people to realize, viz., that it is in every way far better for themselves to learn to depend upon their own exertions than upon the charity of the government.

Naturally the prejudice was most deeply rooted among the Blackfoot people, who were his more immediate followers, but even among them there are clear signs of its giving way, for among them they now hold some eight hundred head of cattle, and others of their number are becoming clamorous to be supplied. Caution has, however, to be exercised to accommodate the meeting of their desires to their ability to take proper care of stock, and this, it is obvious, they cannot learn to do in a day.

While it is among the Indians just referred to that the increasing desire to acquire live stock has been most noticeable, it has not been confined to them, for many of the bands in British Columbia have been quietly accumulating more cattle, and not a few are fairly well supplied, as for example those on Queen Charlotte's Island, who have been exporting beef to the mainland.

The tendency among some of the Indians in the province of Quebec to purchase cattle, noticed last year, has been somewhat checked by the prevalence of higher prices.

Although not of any extended import, it may be worth while to notice that a market seems to have opened up in the east for ponies which many of the Indians,

notably those in Treaty No. 7, have continued to keep in large numbers, to the detriment of more useful animals.

Some years ago an effort was made by the department to get them to exchange these ponies for heifers, but much difficulty was experienced in finding a market for the ponies taken over from them. A few years ago the rush to the Klondike created a temporary demand for Indian ponies for purposes of transport. During the year a good many have been shipped to Toronto, not only from the Northwest Territories, but from British Columbia, one band at Tobacco Plains, in the Kootenay district, having disposed of over one hundred head.

Natural Resources.

A large proportion of the Indians in all the provinces depend upon hunting, trapping, fishing, and gathering wild berries, not only directly to furnish them with food but indirectly through sale or barter to provide other necessaries or the wherewithal to purchase them.

In the province of Quebec the bulk of such Indians are to be found along the lower St. Lawrence from the Saguenay to the Gulf, and they enjoyed an excellent season, the product of their exertions having reached the very handsome total of $101,738, which is an increase of $40,437 over what they made the year before, notwithstanding the fact that it was a favourable one. These Indians do not depend to any great extent upon fishing, although their earnings from that source amounted to $7,440.

In Ontario the same class of Indians being situated for the most part along the lakes rely a good deal more upon fishing and proportionately less upon hunting, and they realized $61,291 from the former and $136,014 from the latter source.

In the province of Manitoba the main reliance of the outlying bands is upon fishing, the returns from which amounted to $104,834, but none the less they hunt and trap to a considerable extent and made $58,365 by such means.

A succession of two wet seasons has had the effect of raising the waters in the districts inhabited by the Indians referred to, and consequently restocking them with fish and more especially with sturgeon.

From the same cause muskrats have been very plentiful and big game has been driven from the lower lands into closer proximity to where the Indians live.

In the Northwest Territories comparatively few of the bands have access to fisheries, and as a consequence only $28,458 were realized from that source, as against $111,884 from hunting.

The aggregate increase from the two sources over the earnings of the preceding year slightly exceeded $56,000, these pursuits having received a certain impetus from the comparative failure of crops experienced by many of the agriculturists.

In British Columbia the Indians throughout the province depend largely upon the salmon for their food-supply, and numbers of those in the Fraser River, Cowichan, West Coast, Kwawkewlth, Northwest Coast, Babine and Williams Lake agencies trust to no small extent to their earnings at the canneries to meet their requirements.

While they catch and consume the salmon which run during the earlier months of the season, the autumn run is of still greater importance to them, as upon it they depend to lay up for their winter's consumption.

In the Kamloops-Okanagan and Williams Lake agencies the autumn run was poor and consquently the Indians were to a considerable extent deprived of the main staple of their customary winter's food-supply.

On the other hand in the rivers of the Northwest Coast, in the Babine agency, the run was good, as also in the Kwawkewlth agency.

The run of salmon in the summer of 1900 was very poor and stopped early, which fact combined with the labour troubles at the Fraser river canneries made the season practically barren of results for many of the Indians.

Along the coast the Indians get an unlimited supply of other kinds of fish at all seasons of the year, and many of them make large quantities of oulachon oil, which is highly nutritious and is eaten in conjunction with almost every other article of diet.

In addition to salmon, the flesh of cariboo, moose and other deer, either fresh or smoked, as well as that of mountain sheep and goats, is consumed in considerable quantities. The fall hunt was a successful one, as early snow-storms drove the game down to the lower levels more accessible to the hunters.

The aggregate earnings from fishing, $408,240, and from hunting and trapping, $198,843, show an increase from these combined sources of $88,270, as compared with the year before.

The part that wild fruits and berries play in providing the pabulum of the hunting and fishing Indians is an important one, for as none are too well stocked with potatoes or garden stuffs and many have none at all, these berries, which they preserve in large quantities, not only tend to vary the monotony of their diet of cured fish and meat, but to render it more wholesome.

The manner of preserving and using these berries varies in different districts. In the old days when the Indians of the plains depended on the buffalo, their practice was to cut the flesh into slices, dry it in the sun and then pound it up with berries into what was and is known as pemmican. The same practice still prevails in the making of premmican from the flesh of deer. In parts of British Columbia and possibly elsewhere, the berries are spread out on frames some three yards in length by half a yard in width, and cooked over hot coals until they become of such consistency as permits of their being rolled out into sheets and then, after having had their edges trimmed up into cylindric shape, stowed into cases of cedar bark, which are then carefully tied up and put away for future use.

Various Earnings.

In the older provinces and more particularly in Nova Scotia and Quebec such of the Indians as live within or have ready access to the centres of civilization earn a by no means inconsiderable amount by the sale of certain manufactures, some of which are peculiar to themselves. These cover a large variety of articles, and include all

sorts of Indian wares, such as bead-work, mats, mittens, moccasins, snow-shoes, lacrosse sticks, also baskets, axe and pick handles, churns, barrels, tubs, casks, oars, skiffs and canoes.

The village of Jeune Lorette until a few years ago was the great centre for the manufacture of moccasins, but the industry formerly so flourishing has gradually fallen away, and despite an occasional revival, such as occurred during the first years of the influx into the Klondike region, has now become practically a thing of the past.

In like manner the village of St. Francis has always been the headquarters for the manufacture of baskets, which together with fancy work the Abenakis have been in the habit of disposing of at summer resorts in the White mountains and on the Atlantic coast in the United States.

There has been somewhat of stagnation in this industry of late, attributed to a glut of products in the market, but the expectation is that before long the congested condition of the trade will be relieved.

Such of the Indians in these provinces as elect to maintain themselves as wage-earners find no difficulty in securing employment. Where accessible the preference seems to be for work connected with the lumbering industry, either in the camps or in the saw-mills, or rafting timber or drawing logs, or lading and unlading vessels, but not a few hire out their services to farmers and fruit-growers, while some who are within reach of factories work in them, and others, but in much smaller numbers, obtain employment as mechanics.

The outlying bands in Ontario and Manitoba are mainly dependent upon two sources for employment, viz., the lumbering and fishing companies, and while many of the bands are beyond the range of their operations, yet as such companies extend their enterprises, which they are fast doing, they are bringing the opportunity for profitable employment within reach of an increasing number of the Indians.

In British Columbia the Indians in some directions have been somewhat elbowed out by Japanese and other competitors in the labour market, yet the great activity of late years in the opening up of the province and the development of its industries has so increased the opportunities for getting work, that if crowded out in one direction they have been able to turn to some other, and the aggregate earnings from wages have been steadily increasing.

Of all Indians within range of civilized centres, those in the Northwest Territories are least favourably situated with regard to obtaining employment or opportunities for supplementary earnings, their openings being pretty well confined to the sale of hay or fire-wood, or the doing a little freighting or farm work for the settlers. Unfortunately when the season proves unfavourable for agricultural results, and the necessity for supplementary earnings is greatest, the settlers are likewise affected and so far from furnishing the Indians with employment are apt to enter into competion with them in supplying the towns and villages with wood and hay. In any case the supply of dead wood which the Indians dispose of is on many of the reserves becoming exhausted, and they are hunting round for some other means of earning money, and some have been experimenting in the direction of burning lime for sale.

As an offset to the conditions just described, there is the fact that the farming Indians of the Territories have a resource in their live stock, which many of those in some ways more favourably situated do not possess.

On the whole taking the Dominion throughout, Indian like other labour has been in great demand, and in that respect the year has been a very prosperous one.

Dwellings.

The tendency of the Indians to congregate together and live in villages, even at the sacrifice of convenience relative to the pursuit of their avocations, can be traced back directly to their circumstances and surroundings prior to or at the time of their settlement upon their reserves.

In the province of Quebec it was the custom of the pioneer settlers to take up their lands in long narrow strips converging upon one spot where they could build their dwellings in close proximity for mutual protection against savages who roamed the country in those days. No wonder then that the Indians, having fresh in their memories the necessity for the vigilant exercise of every precaution for defence against other bands or tribes with whom each was more or less at enmity, followed the example before their eyes when they settled down to agricultural pursuits and adopted the village system which still prevails among their farming communities in the province. There influences not only survived the conditions which produced them in Qunbec, but extended far beyond its boundaries.

The inconvenience of conducting farming operations under such a system is so obvious that its adoption on the reserves in these new provinces was from the first strongly opposed by the department, but the long survival of the feeling of insecurity rendered it very up-hill work to induce the Indians to spread out and take up their lots in severalty, and build their houses at a distance from each other ; not even yet has all that is desirable in this direction been accomplished.

In British Columbia the occupations of the Indians and the physical features of the country all favour the village mode of living.

Speaking generally, the best class of houses is to be found in the villages, and where within reach of saw-mills, the greater proportion are sufficiently good and many really excellent frame buildings.

From a sanitary aspect, congregating in villages which lack any regular system of drainage is apt to have a prejudicial effect, but the department's regulations for insuring cleanliness in the surroundings of the houses have been so far enforced that disease which would naturally follow upon their neglect is of comparatively rare occurrence on the reserves.

In the maritime provinces the Indians as a rule who remain stationary at any one point have fairly good houses, many of them frame structures ; but those who keep moving about in pursuit of a market for their wares, or of other desultory callings, have much inferior houses, some of them being of a very wretched character.

The outlying bands throughout who live by hunting, fishing and trapping and who are consequently more or less nomadic in their habits, when they live in houses at all, are satisfied with the most primitive kind of structures which will serve to protect them from the inclemency of the weather, and no radical improvement need be looked for in this respect so long as their environment remains unchanged.

In Ontario among the farming communities the houses are sufficiently good to meet the requirements of their occupants.

In Manitoba some very superior dwellings and buildings for public purposes are to be seen on the St. Peter's reserve. Among other farming communities in that province, as also in the Northwest Territories, a steady although necessarily very gradual improvement is ever taking place, and speaking generally a growing disposition to expend more of their means on the purchase of lumber, doors, windows, shingles, and furniture for the improvement of their homes is distinctly noticeable, and remembering that all domestic virtues emanate from love of home, this deepening interest must be regarded as a very hopeful sign.

Education.

In the first annual report on Indian Affairs made by me, viz., that for the year 1896-97, I had occasion to remark that the question of industrial education for Indian children must be considered with relation to the future of the pupils and that only the certainty of some practical results could justify the large expense entailed upon the country for the maintenance of these schools.

In the following year's report I observed that, if the sole object were the improvement of the individual pupils' positions in life, there could be little difference of opinion as to the necessity for restricting the number of those trained to that for which there was reasonable expectation of finding openings, but on the other hand if the object were to have the graduates return to their reserves and there become centres of improving influence for the elevation of their race, there would appear to be less necessity for so strictly limiting the recipients of special training.

Increased experience and reflection tend to the conviction that the ultimate aim of the training at these schools is so identified with the theoretical object of the whole policy which has governed this country's dealing with the Indians, viz., the fitting them for the full responsibilities of citizenship, that they must be considered in close conjunction.

As has already hereinbefore been pointed out, that policy, or the machinery provided thereunder, while very satisfactory up to a certain point, has not proved as successful in amalgamating the Indians with other classes of the community, and the question before the department for consideration is as to what expectation need be entertained of the schools turning out graduates who will take their place as citizens. It certainly will be necessary to devise some means by which this desired amalgamation may take place.

In Ontario a long extended experience shows that under the present system graduates, with the rarest exceptions, return to the communities of their own race,

and although, perhaps better equipped than the majority of those who seek employment of various kinds among the whites in their vicinity, none the less to all intents and purposes remain Indians, with all their deepest interests, affections and ambitions centred in their reserves. Nor does there seem any reason to anticipate other ultimate results in the younger provinces when their conditions shall have reached those now existing in the older ones.

Experience, therefeore, would seem to suggest that measures for the enfranchisement of the Indians might better precede the reasonable expectation of the schools realizing their intended purpose.

Under existing conditions in the younger provinces, where there are so few openings for graduates, and where the Indians have still much to learn before reaching the stage of those in the older provinces, it may well be that the graduates are for the present doing the greatest amount of good in the direction of elevating their race, by returning to live on their reserves, and as in any case it would appear that for the large majority there is no alternative, it is the bounden duty of the department to direct its efforts as far as it may reasonably do so towards guarding against retrogression on their part and insuring the exertions of an influence for good.

With that necessity in view the department is experimenting in the direction of the establishment of little colonies of these graduates on their reserves, in the hope that they will not only retain for themselves the benefits received at the schools but exert a beneficial influence upon their people. We have instances where remarkable results have been obtained, and during a recent visit to the west I was privileged to see what could be done in this direction.

With regard to the interest manifested by Indian parents in the education of their children, there seems to be nothing to add to what was said last year, namely, that so long as the Indians remain a distinct people and live as separate communities, their attitude towards education, at least in so far as the vast majority of them are concerned, will in all likelihood remain much as it is to-day, which means that they will not be anxious for further education for their children than will serve as a convenience and protection with regard to such dealings as they have with the white population. While no signs are apparent of any deepening of this interest, there are influences quietly and steadily at work to extend its sphere in the younger provinces. These are the bringing of additional bands into contact with civilization as settlement and business enterprises push forward, the tendency in the outlying districts for the Indians to depend less for their maintenance upon the nomadic pursuits which are so inimical to anything like regularity of attendance at any rate at the day schools, and the gradual encroachment of the light of Christianity upon the still remaining pagan element.

There are 290 Indian schools of all classes in the Dominion, being an increase of 3 over the number for the preceding year.

Of day schools 2 have been closed, viz., those at Norway House and Wabuskang, in the province of Manitoba, while 2 new ones have been opened respectively at Bersimis in Quebec, and at Herschel Island, outside treaty limits.

Three new boarding schools have been established, viz., one at Thunderchild's reserve in the Battleford agency, the others at Holy Angels and Smoky river, all in the Northwest Territories.

Of the 290 schools, 40 are classed as 'undenominational,' 104 are conducted in connection with the Roman Catholic Church, 93 with the Church of England, 40 with the Methodist and 13 with the Presbyterian churches.

The number of children on the roll of all classes of schools was 9,576, as against 9,634 for the preceding year, and the average attendances 6,117 as against 6,193, a slight decrease in both directions.

There has been a slight increase in the attendance of pupils in the provinces of Quebec and Nova Scotia, and in the Northwest Territories, as well as outside treaty limits, but a decrease in Ontario, New Brunswick, Prince Edward Island, Manitoba and British Columbia.

In addition to the number of children brought under educational influences at Indian schools, there are some in the older provinces attending the day schools of the white communities in their vicinity.

Morality.

The Indians during the year have fully sustained their reputation as a law-abiding people, and despite their exemptions with regard to certain civil matters, they are as amenable to the criminal laws of the country as any other subjects of the Crown, but offences, at any rate of a serious nature, are few and far between.

There is, however, a class of offence which is still far too common, and very much to be regretted, viz., the desertion of each other and their mutual families by husbands and wives, too often followed by immoral alliances with others, and having as an attendant feature the failure to support deserted wives and children.

The usual simple and direct method under municipal laws of dealing with such offences in the police courts is wanting with respect to Indians living on their reserves.

The Indian Act attempts in a measure to make up for the lack of machinery for the punishment of such offences by providing for the deprivation of the deserters of their annuity moneys and real estate within the reserves, and their application to the support of those deserted, but the deterring influences of such measures are not found to be very efficacious.

This failure to appreciate the sacred character and obligations of the marriage bond as well as other forms of laxity between the sexes, although not confined to them, is most prevalent among pagan bands, and those who have most recently come under Christianity and civilizing influences; but although there is much to be deplored by those who are earnestly striving for the elevation of the race, there would not appear to be any cause for discouragement if the mind be fixed upon what has been

accomplished rather than allowed to dwell exclusively upon what remains to be done. Even among pagan bands, polygamy is becoming comparatively rare, and as to other forms of immorality, while it is impossible to know how much may be kept out of sight, the same remark applies to other than Indian communities, and the pains taken to conceal what may be practised, indicates a growth of a public moral sentiment among the bands.

With regard to the use of intoxicants, it may be said that among such of the bands in the older provinces as have been for long in close contact with civilization, in one respect the same condition exists as among other classes of the community, inasmuch as among all there are to be found individuals who will indulge to excess whenever opportunity offers.

It is not always possible to enforce the prohibitory provisions of the Indian Act, although the department has been taking the most effective measures to do so, so long as the sale of liquor is carried on in the white communities with whom the Indians are constantly in touch. It is very pleasing to know, however, that the difficulties and dangers placed by the prohibitory clauses of the Indian Act in the way of Indians getting liquor, strongly militate against the formation of the class of habitual and moderate drinkers, who are indeed rare among them, and consequently against the development of drunkards. The fact that it is illegal for Indians to use intoxicants at all, naturally directs increased attention to the few who indulge to excess ; but on the whole there is not much to complain of with respect to those in the older provinces who live near the centres of civilization.

In the younger provinces such of these Indians as live in proximity to settlement have not yet had time to so fully realize the dangers of strong drink and to learn to control their natural appetite for it as those under similar conditions in the older provinces, and there is a good deal of traffic in intoxicants carried on with them, the medium for the most part being their half-breed friends and relatives, who hang about the outskirts of the reserves or the towns and villages where the Indians take their hay and fire-wood to market.

On the whole, however, if the situation cannot be regarded altgether as satisfactory, it is not lacking in features which afford ground for satisfaction.

Lands.

Surrendered and surveyed Indian lands to the extent of 40,720·41 acres and value of $45,124.98 were sold by local agents during the year, and 280 patents were issued to those entitled to them, under the provisions of the 45th section of the Indian Act, of which the county and district registrars, and in the province of Quebec, the Honourable the Provincial Secretary were respectively advised as is customary.

The following lands, surrendered with a view to their disposal for the benefit of the owners, were placed on the market for sale, subject to the land regulations of the department, viz.:—

Portions of the Mississagi reserve, in the townships of Thompson and Cobden, in the district of Algoma, ten lots in the St. Peter's reserve, in the province of Manitoba, surrendered in 1875, and all of the Gambler's reserve, near Binscarth, with the exception of a small portion retained for an individual Indian who continues to reside there.

In the case of the last mentioned, the limit of residential condition attached to sales was reduced to one year.

A number of applications, not, however, followed by any purchase, have been made for mineral claims on the Garden River and Batchewana reserves.

Location tickets protecting individual Indians in their rights with respect to lots on their reserves have been issued to the number of 64. Last year there were 912 of these shown to be current, which with the addition of 64 new ones would bring the number up to 976, but as in some cases more than one old ticket has been merged into and re-issued as a single new ticket, the number current when the fiscal year closed was 964.

During the year 100 leases have been arranged between Indian locatees or owners, under the provisions of the 11th section of the Act, which, after deduction of expirations and cancellations, left 1,052 such leases current when the year terminated.

One new license was issued and one revised under the provisions of the timber regulations governing their issue with respect to various classes of timber on surrendered Indian lands, thus making 26 outstanding at the end of the year.

Surveys.

In Ontario the townplot of South Baymouth, Manitoulin Island, and the western portion of the Mississagi reserve have been subdivided.

A number of lots in the townplot of Bury, in the township of St. Edmund, county of Bruce, have been reposted. Indian holdings in the surrendered part of the Whitefish River reserve in the district of Algoma have been surveyed, and certain other lands in the same locality valued, all with the view to their being placed on the market for the benefit of their respective owners.

In Quebec the boundaries of the Maria reserve in the county of Bonaventure, were retraced and posted, and an inspection was made of the Doncaster reserve, in the county of Montcalm, with the intention of submitting to the Indians the question of its surrender for subdivision and sale.

In New Brunswick a survey was made of a short piece of road connecting the Indian village on Tobique reserve, Victoria county, with the new bridge over the Tobique river.

In British Columbia the surveyors in the employ of the department have been engaged in the following work, viz.:—

Surveys have been made on the Skeena river, of Reserves Nos. 1 and 5, of the Kitsilas band ; and the survey of the reserves for the Kitwangar, Lakelse and Kitlathla bands are being prosecuted. I am sorry to report that a young man, Mr. Herbert Hall, attached to the survey party engaged in this work, was accidently drowned while passing through the Kitsilas canyon.

In the Okanagan agency, survey of the boundaries of the Osoyoos reserve is being completed, and surveys of the reserves at Douglas and Canoe creek are being made.

Examinations and surveys were made at Chilliwack, Cheam, Marsqui and Katzie, to ascertain what damages the Indians may have sustained in connection with the construction of dykes by the provincial governement at these points.

A survey, examination and report have been made of the dam and irrigation ditches on the Neskainlith reserve, in connection with a claim for damages, supposed to have arisen from overflow from these works.

A survey of the Sicamous reserve, No. 3, of the Spallumcheen band and a resurvey of the Klickcumcheen reserve at Lytton, have been made.

A survey and report in connection with an irrigation ditch through the Nanaimo reserve, and an examination of the lands of the Cowichan Indians, with the view of providing additional land for them, if necessary, have been made.

A survey is being made of proposed routes for an irrigation ditch through the Bonaparte reserve.

In Manitoba and the Northwest Territories the following work has been undertaken, viz. :—

The survey of certain roads on the Blackfoot reserve and levels in connection with irrigation on the same reserve.

A survey, estimate and report, in connection with the transportation of coal across the Bow river from a mine on the Blackfoot reserve.

An examination in connection with the drainage at the Calgary industrial school.

Levels and instructions in connection with the proposed irrigation on the Stony reserve.

The survey of certain reserves at Lesser Slave lake in the new treaty, No. 8.

The Indians having surrendered the reserves known as 'The Pheasant's Rump' and 'Ocean Man' in Assiniboia, they have been surveyed and subdivided into sections, in order that the land may be sold for their benefit.

The boundaries of the White Bear reserve and of the Indian Head or Assiniboine reserve, have been retraced.

The subdivision into 40 acre lots of the Oak Lake reserve, in order that the Indians may be severally located thereon.

As, however, at the date of writing there has not been time for the surveyors engaged in field work in British Columbia and the Northwest Territories to make more than interim reports, the preceding statement of work undertaken or completed is given subject to the possibility of subsequent amendment.

Financial.

At the close of the fiscal year the capital of the Indian Trust Fund, which at the end of the preceding year amounted to $3,893,622.63, had increased to $3,941,393.77.

Collections aggregated $129,357.87, and disbursements $274,063.62.

The amount expended from the Consolidated Revenue Fund voted by parliament for the purposes of the department, was $1,019,329.12. On June 30 last, the balance to the credit of the Indian Savings Account, for the funding of the annuity money and earnings of pupils at industrial schools, was $24,103.96, deposits and interest during the year having reached the sum of $10,764.22, withdrawals to the extent of $4,816.84 having been made during the same period.

I have the honour to be, sir,

Your obedient servant,

JAMES. A. SMART,

Deputy Superintendent General of Indian Affairs

REPORTS

OF

SUPERINTENDENTS AND AGENTS

PROVINCE OF ONTARIO,
CHIPPEWAS OF BEAUSOLEIL,
PENETANGUISHENE, August 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and statistical statement showing the condition and progress of the Indians under my supervision during the year ended June 30, 1901.

Reserve.—The reserve of this band is located on Christian island, situated at the southerly end of Georgian bay on the steamboat route from Collingwood to Parry Sound, and from Collingwood to Midland and Penetanguishene.

Tribe.—This band is called the 'Chippewas of Beausoleil,' the Indians at one time having lived on the island of that name, where a few of the older families still reside.

Population.—There is a decrease of five in the population since last year, the number now being two hundred and sixty-three.

Health and Sanitary Precautions.—The health of the band has been good, with the exception of three cases of consumption. All sanitary measures are carefully observed and no contagious diseases have been prevalent.

Resources and Occupations.—This reserve is most favourably situated for farming and stock-raising. A number of the Indians are working their locations with marked ability, while others act as guides for American tourists. Others make a livelihood by fishing and hunting, while a number of the women are engaged at basket-making and fancy work, at which they are very expert.

Buildings.—The houses are gradually being made more comfortable and are kept neat. The barns are also in better condition.

Stock and Farming Implements.—This reserve is admirably adapted for cattle, and a poor beast is never seen on the island during the summer season.

In the way of better implements there is an improvement.

Education.—There is one school on the reserve being conducted under the auspices of the Methodist Missionary Society. The teacher is the Rev. Mr. Evans, who is a young man of marked ability. The children make good progress, although some difficulty is experienced in securing regular attendance.

Religion.—There are two churches on the reserve. Services are held twice on each Sabbath in the Methodist church by the Rev. Mr. Evans, both of which are well

attended. Service is also held in the Roman Catholic church by Mr. John Copegog, sr., a most excellent man.

Characteristics and Progress.—The Indians, generally speaking, are industrious and most certainly law-abiding, and as it is the policy of this agency to endeavour to keep them employed, they have the means of making their homes comfortable and providing for their families.

Temperance and Morality.—There is a marked improvement in the band in these respects and with very few exceptions intemperance rarely comes under my attention.

I have, &c.,
CHAS. McGIBBON,
Indian Agent.

PROVINCE OF ONTARIO,
CHIPPEWAS OF GEORGINA AND SNAKE ISLANDS,
VIRGINIA, July 12, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and statistical statement for the year ended June 30, 1901.

Reserve.—The reserve of this band is situated in the southern waters of Lake Simcoe, Georgina island, being about five miles from Jackson's Point, a popular summer resort, and Snake island, twelve miles further west, near Morton's Park, another summer resort. The reserve contains three thousand four hundred and ninety-seven acres, and is a rich clay soil.

Tribe.—These Indians are nearly all Chippewas.

Vital Statistics.—This band numbers one hundred and fifteen, consisting of thirty-six men, thirty-seven women, and forty-two young people under twenty-one years of age. There is a decrease of one in the population, there having been four deaths and three births during the year. One of the deaths was accidental, one caused by cancer and one by consumption.

Health and Sanitary Precautions.—The health of the band has been very good during the past year and there has been no contagious disease. The houses and yards are fairly well kept, all garbage being removed and burnt early in the spring, and all ordinary sanitary regulations pretty well observed.

Resources and Occupations.—Farming is the chief occupation, the soil being a rich clay, and well adapted for raising grain or roots. Some of the band rely on farming altogether for a living and are doing pretty well. A few who depend mostly on working out and basket-making do not do so well as those who farm. Some make considerable money with fancy work, and others earn some money by making oars and axe-handles and whiffletrees. Some of the young men go north in the spring to drive saw-logs and work in the saw-mills, for which they get good wages. A few peel slippery elm bark and dig burdock roots, which they sell to druggists.

Buildings, Stock and Farming Implements.—The buildings are all of wood. There are twelve frame houses and three frame barns, and the rest are built of logs. The dwelling-houses, with a few exceptions, are well kept. The Indians have improved their buildings considerably the last year, two or three of them having added a good kitchen to their dwellings. Others have built stables and renewed floors in their dwellings.

Stock and implements are very good.

Education.—There is a good school on Georgina island. It is taught at present by the Rev. Mr. Oakley, who takes great interest in the moral welfare of the Indians.

Religion.—There is one Methodist church on the reserve, two services being held each Sabbath,—one conducted in the Indian language and one in English. The services are well attended. A number of the Indians are members of the church. They keep the church very nice and tidy and in good repair. No other religion than Methodism is taught on the reserve.

Characteristics and Progress.—Most of the Indians are fairly industrious and law-abiding and are making fair progress. A few are indolent and only seem to care for the present and do not make much effort to provide anything ahead. Charles and John Big Canoe, Daniel Big Canoe, Alfred McCue, James and Thomas Charles, James Ashquabe, William J. Ashquabe and Thomas Port are quite industrious and doing well.

Temperance and Morality.—Quite a number of the band do not drink liquor, but a few will drink if they can get it. The arrest of a white man last summer for being drunk on the reserve had a very good effect. Most of the Indians are moral in their conduct.

General Remarks.—The members of this band are intelligent and speak the English language well ; most of them read and write cleverly. They are very fond of music ; a number of them have organs, and are good players. They usually have a good church choir and are sometimes employed to sing at parties held by white people.

I have, &c.,

JOHN YATES,
Indian Agent.

PROVINCE OF ONTARIO,
CHIPPEWAS OF NAWASH,
CAPE CROKER, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report and statistical statement on local Indian affairs for the year ended June 30, 1901.

Reserve.—There is only one reserve in the agency ; it is situated in the extreme northeast portion of the township of Albermarle, in the county of Bruce. This reserve contains nearly sixteen thousand acres, about sixty per cent of which is good for cultivation.

Tribe.—These Indians are nearly all Chippewas.

Vital Statistics.—This band numbers three hundred and eighty-four souls on the pay-list and about thirty non-treaty Indians who reside on the reserve ; on the pay-list are one hundred and twenty men, one hundred and twenty-nine women, eighty boys and fifty-five girls. There have been thirteen births and seventeen deaths. One woman came in by marriage and one went out by marriage, making a decrease of four as compared with the census of last year.

Health and Sanitary Precautions.—The health of the Indians has been good, except in the case of a number of consumptives; there has been considerable mortality on account of this disease. There was on outbreak of chicken-pox in three families

and a scare that it might be small-pox, but no fatalities occurred, as prompt measures were taken to prevent its spread.

All sanitary measures are carefully attended to, the dwellings whitewashed and in most cases kept neat and clean, and the premises in good order, being kept free from rubbish and other refuse matter.

In their personal appearance the Indians are generally neat and clean.

During the scare of small-pox and chicken-pox the doctor had a busy time, and nearly every person on the reserve was vaccinated.

Resources and Occupations.—In agricultural pursuits the Indians are making steady improvement, a few of them are working their holdings well and are doing fairly well. They have all the farming implements necessary. They have a good number of horses and are accumulating considerable cattle during the past three years. They also raise a large number of hogs, but the sheep are few in number. A number of the young men work in saw-mills, loading vessels, rafting in summer, fishing in the fall, and in lumber camps in winter, some work for white farmers.

A number of the women make baskets for sale and pick berries.

Education.—There are three schools on this reserve, all of which are making fairly good progress. The school buildings and premises are in good repair.

Religion.—The Indians attend divine service fairly well. They have two comfortable and commodious churches : one, Methodist, with about two hundred and forty adherents ; the other, Roman Catholic, with about one hundred and thirty adherents. Seventeen of the Indians are Anglicans.

Temperance and Morality.—I am pleased to report that a large majority of the band are strictly temperate. A few noted characters among the Indians are addicted to strong drink when they can get it at outside points on days of large gatherings ; but on the whole there is a decided improvement in this respect. Most of the Indians are beginning to show a strong disrespect for those who indulge in the fire-water.

Regarding morality, there is still room for improvement, but they are steadily improving, and nearly all the leading people belonging to the band seem anxious to assist in having the guilty ones punished. There appears to be a steady and healthy change for the better.

Characteristics and Progress.—The industrious Indians are getting along very well ; their progress on the whole has been fair. They succeeded in getting in a very good and increased acreage of crop this spring. The hay is a good crop this year. The fall wheat and all spring crops are looking well and promise to be above the average. On account of the dry season last year, shortage of crops and unusual deep snow during the latter part of the winter, the Indians were pretty hard up last spring. The department kindly came to their assistance by advancing to them between $600 and $700 in hay and seed. It promises to be a good investment for them. It is hoped that an occasion of this kind will not occur again.

The department's policy recently put in operation on this reserve in the matter of allowing individual Indians who are willing to work and improve their holdings and homes to cut and sell limited quantities of timber under permit, the proceeds passing through the agent's hands to pay for the improvement of their homes, in paying for material and work in constructing and finishing their houses and barns and building wire fences, is beginning to have a beneficial effect on their homes and surroundings. It is not a very popular movement for the agent with those who would like to squander the proceeds as they formerly did, but every Indian is pleased after he has his building finished and his good up-to-date wire fence.

The department even allows them if they are industrious to pay for cows and horses in this way. Several of the industrious Indians are largely benefiting themselves and adding to the good appearance of the reserve generally.

The Indians' annual fall agricultural show, which has been held each fall for the past three or four years, has been fairly successful under existing circumstances. It creates a good deal of healthy rivalry among the Indians in competing with one another in the products of their labours. It is about the only big day that they all participate in for outside sport and amusement.

I have, &c.,

JOHN McIVER,
Indian Agent.

PROVINCE OF ONTARIO,
CHIPPEWAS OF RAMA,
ATHERLEY, August 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report with statistical statement showing the condition and progress of the Indians of this agency for the year ended June 30 last.

Reserve.—The reserve is situated in the township of Rama, in the northern extremity of the county of Ontario, on the border of Lake Couchiching.

Tribe or Nation.—The Indians of this band belong to the Chippewa tribe.

Vital Statistics.—The population on this reserve (exclusive of those Indians residing on the reserve who do not belong to the band) is two hundred and thirty-five, consisting of fifty-three men, sixty-five women and one hundred and seventeen children.

During the year there have been ten births and five deaths, making an increase of five since my last report.

Health and Sanitary Precautions.—The health of the Indians during the year has been good, there having been no epidemic among them. Their houses are clean and comfortable, and the sanitary precautions prescribed by the department are well observed. Most of the younger members of the band were vaccinated last spring.

Resources and Occupations.—The resources of this reserve are largely agricultural. The members of this band have exceptional means of earning a living. Besides their agricultural pursuits, which are gradually being improved, they secure considerable employment at lucrative wages, acting as guides to tourists who visit the adjacent summer resorts during the season, and in the winter they secure work in the lumbering camps ; in the spring they are employed as river-drivers.

Buildings, Stock and Farm Implements.—Most of the families live in frame dwellings, there being only two shanties on the reserve ; and to the credit of the Indian women, be it said, their homes in most cases are neat and clean. The barns and stables are fairly good.

The stock is of average breeding.

These Indians are well supplied with farm implements.

Education.—Facilities for education are within the reach of all the children on the reserve. The school is taught by the Rev. J. Lawrence, who is most painstaking and earnest. The course of studies is that authorized by the department. Pupils who attend regularly are making fair progress.

Religion.—There is one Methodist church on the reserve, which is well finished throughout and is frequently visited by strangers, who admire the neatness and general appearance of the premises.

The spiritual affairs of the Indians are attended to by the Rev. John Lawrence, who manifests a warm interest in their spiritual and temporal affairs.

Temperance and Morality.—A few of the Indians of this band are addicted to strong drink and will imbibe freely when they get the opportunity, which is often given them by unscrupulous whites, but I am pleased to say, a large percentage of the band are temperate and moral.

I have, &c.,

D. J. McPHEE,
Indian Agent.

PROVINCE OF ONTARIO,
CHIPPEWAS OF SARNIA,
SARNIA, August 16, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement concerning the Indians in my agency for the year ended June 30, 1901.

Reserves.—The Chippewas of Sarnia reside on three reserves, the Sarnia reserve, situated on River St. Clair, adjoining the town of Sarnia on the south boundary, and the Kettle and Stony Point reserves, situated on Lake Huron.

Vital Statistics.—The population of this band is now four hundred and forty-four, a decrease of eleven since my last report. There have been twelve deaths and six births, one Indian became enfranchised and ceased to be a member of the band, and four women have commuted their annuity, having been married to men belonging to other bands.

Health and Sanitary Precautions.—The health of these Indians has been fairly good this last year, and sanitary matters have been carefully attended to ; the Indian women, as a rule, keep their houses quite clean and tidy.

Education.—There is a day school on each of the three reserves. That on Sarnia reserve is taught by Miss Alice Matthews ; the school at Kettle Point is taught by Miss Ethel Jacobs, and the school on Stony Point reserve has been closed for the last six months, as the attendance was too small to justify the expense of employing a teacher.

Religion.—There are two churches on the Sarnia reserve, one Anglican, the other Methodist, where services are held regularly. There is also one on Kettle Point reserve, where regular service is held; and also on Stony Point reserve there is a church, but the services have been discontinued, and the Indians from there go to Kettle Point to service. These services are all well attended.

Characteristics and Progress.—These Indians make their living chiefly by farming ; in the summer time, considerable money is made by fishing. The crops this year are not so good as last year on the reserve, although in some instances the grain has yielded well ; one man had a field of wheat which brought forty bushels to the acre. The hay will be very good, and corn is promising well, but oats and potatoes will be light. The grain is all harvested and most of it is threshed.

I have, &c.,

A. ENGLISH,
Indian Agent.

PROVINCE OF ONTARIO,
SAUGEEN AGENCY,
CHIPPEWA HILL, July 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1901.

Reserve.—The Saugeen reserve is located in the county of Bruce, on Lake Huron. It comprises about nine thousand and twenty acres.

Tribe or Nation.—The Indians of this reserve are Chippewas.

Vital Statistics.—There are three hundred and sixty-six Indians on this reserve, made up as follows :—one hundred and seventy-seven males and one hundred and eighty-nine females. There have been fifteen births, two united with the band by marriage and one by adoption. There have been nineteen deaths and one decrease by an other cause, making a decrease of two as compared with last year.

Health and Sanitary Precautions.—The health of the Indians has been fairly good during the past year. Sanitary regulations are observed.

Resources and Occupations.—Farming is the chief occupation ; a limited quantity of timber is cut and sold during the year ; a number of the male Indians engage with white men as hired help. Other resources are basket-making, rustic work, berry-picking and gathering of ginseng root.

Buildings, Stock and Farming Implements.—The improvement of the buildings on the reserve is very noticeable during the past few years. The improvement in stock and implements is not so noticeable, although there is a change for the better both in quality and number.

Education.—There are three brick school-houses on this reserve, fairly well equipped. They are kept open during the school year. The children are making fair progress.

Religion.—The Indians of this reserve are chiefly Methodists. There are four churches, two brick, one frame and one stone ; three of them are Protestant, one is Roman Catholic. The interest manifested in religion is fair.

Characteristics and Progress.—The Indians are desirous of improving their condition, but do not appear to have sufficient force of character to carry out their desires, so that the progress made is very slow.

Temperance and Morality.—The Indians on the whole are temperate and moral. There are a few who occasionally allow their passions to master them.

General Remarks.—There are three lines in which the Indians are making noticeable progress, viz., religion, agriculture and education.

I have, &c.,
JOHN SCOFFIELD,
Indian Agent.

PROVINCE OF ONTARIO,
CHIPPEWAS, MUNSEES AND ONEIDAS OF THE THAMES,
KOMOKA, August 23, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning the three bands included in this agency, for the year ended June 30, 1901.

ONEIDAS OF THE THAMES.

Reserve.—The Oneida reserve is situated in the township of Delaware, Middlesex county. It contains four thousand six hundred and twenty acres of choice farming land.

Tribe.—These Indians are a branch of the Oneida tribe, one of the confederacy known as the Six Nations.

Vital Statistics.—The population consists of two hundred and fifty men, one hundred and ninety-eight women and three hundred and thirty-six young people under twenty-one years of age, making a total of seven hundred and eighty-four.

Health.—The health of these Indians has been fairly good during the year. No epidemic broke out. Consumption is the most prevalent disease.

Resources and Occupations.—The principal resources are farming and stock-raising. A considerable amount of money is earned by pulling flax among the whites, and from employment in connection with canning factories. A good deal of money is also realized from basket-making and mat-making.

Buildings, Stock and Farming Implements.—The dwelling-houses are principally small frame or log buildings. The barns and horse-stables are fairly good.

The stock is of average breeding.

These Indians are fairly well supplied with farming implements.

Education.—There are two day schools on this reserve. The attendance has been good and the progress made by the children during the year has beeen very satisfactory.

Religion.—There are three churches upon this reserve—two Methodist and one Anglican. The church services are well attended, and the Indians take a lively interest in religious affairs. The missionaries are doing excellent work.

Characteristics and Progress.—Generally speaking, the Oneida Indians are industrious and law-abiding. They are making progress.

Temperance and Morality.—It is to be regretted that some of the Indians occasionally use intoxicating liquor ; and the marriage law is sometimes not observed as well as it ought to be.

CHIPPEWAS OF THE THAMES.

Reserve.—This band occupies a part of the Caradoc reserve, comprising about eight thousand seven hundred and two acres, which for the most part is a beautiful undulating fertile tract of country.

Tribe.—These Indians belong to the Chippewa tribe.

Vital Statistics.—The population consists of one hundred and forty-three men, one hundred and forty women, and one hundred and eighty-six young people under twenty-one years of age, making a total of four hundred and sixty-nine.

Health and Sanitary Precautions.—Sanitary precautions have been well observed. No epidemic broke out during the year. There is more mortality from consumption than from any other disease.

Resources and Occupations.—The resources of this band are principally farming and stock-raising. Last winter a large number of permits to cut and sell soft elm timber were granted. This gave employment during the winter months. Considerable money is earned by pulling flax among the whites.

Buildings and Stock.—The barns and stables, though generally small, are in fairly good repair. The houses are principally small log or frame buildings. Cattle and horses are fair.

Education.—There are three day schools on this reserve. The schools are all well equipped. A new school-house was erected during the year.

Religion.—These Indians take a lively interest in religion. The church services are well attended. A little more than half the population adhere to the English church and the remainder to the Methodist church.

Characteristics and Progress.—These Indians are law-abiding and fairly industrious.

Temperance and Morality.—These Indians are usually temperate. The marriage law is not observed as well as it ought to be.

Munsees of the Thames.

Reserve.—This band occupies two thousand and ninety-eight acres, a portion of the Caradoc reserve.

Tribe.—These Indians belong to the Munsee tribe, the only band of this tribe residing in Canada.

Vital Statistics.—The population of this band consists of thirty-nine men, thirty-two women and fifty-one young people under twenty-one years of age, making a total of one hundred and twenty-two.

Health and Sanitary Precautions.—The health of these Indians has been fairly good. No epidemic broke out during the year. Sanitary precautions have been well observed.

Resources and Occupations.—The resources of this band are farming and stock-raising.

Buildings, Stock and Farming Implements.—The buildings are not as good as could be desired. The stock is fair. The Indians are fairly well supplied with farming implements.

Education.—There is one day school on this reserve. The attendance has been fair and the children have made fair progress in their studies.

Religion.—There are two churches on this reserve—one Methodist and one Anglican. Services are held in these regularly, and are well attended.

Characteristics and Progress.—These Indians may be considered as fairly industrious. Their progress is slow.

Temperance and Morality.—These Indians are generally temperate and fairly moral.

I have, &c.,

A. SINCLAIR,
Indian Agent.

PROVINCE OF ONTARIO,
GOLDEN LAKE AGENCY,
CORMAC, August 23, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Vital Statistics.—The population of this band is ninety-seven, consisting of eighteen men, twenty-six women and fifty-three children.

Health and Sanitary Precautions.—The health of the Indians on the Golden Lake reserve is good. Their houses are very clean; they can compare favourably with any other class of people in that respect.

Occupations.—The Indians cultivate a little land. They also hunt, while some work in the shanties and on the drives in spring. They get good wages, as they are first-class rivermen. The women are very industrious and clean housekeepers.

Education.—The children are progressing, and would do better if they would attend school more regularly. It is hard for the teacher, Miss Casey, who is a splendid teacher, to advance them, but withall there is a marked improvement.

Temperance and Morality.—The Indians of this reserve are moral and temperate in their habits.

I have, &c.,
E. BENNETT,
Indian Agent.

PROVINCE OF ONTARIO,
GORE BAY AGENCY,
GORE BAY, July 4, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning the Indians of my superintendency for the year ended June 30, 1901.

COCKBURN ISLAND BAND.

Reserve.—The reserve of this band is situated on the north side of Cockburn island, which lies immediately west of the Manitoulin island. Its area is about one thousand two hundred and fifty acres.

Tribe.—These Indians belong to the Ojibbewa and Ottawa tribes.

Population.—Fifty-six is the total population of this band.

Health and Sanitary Precautions.—The health of these Indians is generally good. No epidemic of any kind has made any depredations in this band. Sanitary regulations are observed and appreciated.

Resources and Occupations.—Forest, farm and stream are the resources of these Indians. They farm on a small scale. Their principal occupation is working in the bush in winter, in the camps and farm, and loading vessels in the summer.

Buildings.—Their houses are neat, clean and comfortable and fairly well furnished. They have very few cattle and little stock of any kind and very few farming implements.

Education.—There is no school on this reserve.

Religion.—These Indians belong to the Roman Catholic faith, and they have a nice church in which they worship under the guidance of the visiting missionary. They appear to take much interest in religious matters and seem to be altogether a very intelligent band.

Characteristics and Progress.—They are both steady and industrious and are making a comfortable living.

Temperance and Morality.—Partly owing to the absence of liquor on the island and partly on account of their being isolated from any village, these Indians are exceptionally temperate, and in morality are above the average.

General Remarks.—These Indians are very industrious, sober and moral, and will compare favourably with any band in the agency. They intend to pay more attention to farming in future.

Sheshegwaning Band.

Reserve.—The reserve of this band is situated in the northeast part of the township of Robinson, on the Manitoulin island. It contains an area of about five thousand acres.

Tribe.—These Indians are Ojibbewas and Ottawas of the Manitoulin island.

Population.—This band numbers one hundred and sixty-two.

Health and Sanitary Precautions.—The health of these Indians has been fair during the past year. There has been no epidemic amongst them. They keep themselves and premises clean, and observe the sanitary precautions prescribed by the department.

Resources and Occupations.—Farming and lumbering are the chief resources of this band. They took out about eight thousand cedar ties on the reserve during the winter, for which the department secured a fair price. They farm quite extensively, cultivating the land and raising stock, and they make a creditable showing. They work in winter in lumber camps, cutting logs and making ties, and cultivate the land and load vessels in summer.

Buildings and Stock.—Their buildings are neat, clean and comfortable and fairly well furnished. There are three organs in the village. David Sampson and his brother Matthew occupy frame houses and have them fairly well furnished and have good outbuildings. They both farm pretty extensively. These Indians have considerable stock—cattle, horses and pigs, which are well cared for and are in good thriving condition.

Education.—They have a neat and comfortable school-house, and take a great interest in school matters, and are very anxious to get their children educated. The school is closed at present ; they have had no teacher since November 1, 1900.

Religion.—These Indians are for the most part Roman Catholics. They have a nice comfortable church, which is conducted by the Wikwemikong missionaries, and the services are well attended.

Characteristics and Progress.—These Indians are law-abiding and industrious and are making good progress, and their condition is satisfactory.

Temperance and Morality.—These Indians are all that can be wished for in these respects.

General Remarks.—This band is making rapid progress in agriculture and has a strong desire that the children should be educated. These Indians take more than ordinary interest in education, and the band generally, is in a good and thrifty condition.

Obidgewong Band.

Reserve.—The reserve of this band is situated on the west shore of Lake Wolseley, Manitoulin island. The area is about seven hundred acres.

Tribe.—These Indians are Ojibbewas and Ottawas of the Manitoulin island.

Population.—This is the smallest band of this agency, being composed of seven souls.

Health and Sanitary Precautions.—The health of these Indians has been good, sanitary measures have been observed.

Resources and Occupations.—The members of this band depend to a great extent on the soil for their maintenance. They work in the lumber camps in winter, and work the land and load boats in summer, and are comfortable and happy.

Buildings, Stock and Farm Implements. Their buildings are neat and comfortable and fairly well furnished. They have very little stock or farm implements.

Education.—There is no school on the reserve.

Religion.—These Indians are pagans.

Characteristics and Progress.—They are law-abiding and are making a good comfortable living.

Temperance and Morality.—In temperance and morality this band will compare favourably with other bands.

General Remarks.—These Indians, although few in number, are thrifty and are making a comfortable living and will compare favourably with the larger bands.

West Bay Band.

Reserve.—The reserve of this band lies in the township of Billings, at the head of Honora bay, Manitoulin island. Over thirteen square miles are comprised within its limits.

Tribe.—These Indians belong to the Ojibbewas and Ottawas of Manitoulin island.

Population.—The population of this band is three hundred and twenty-nine.

Sanitary Precautions.—The sanitary precautions recommended by the department have been for the most part observed, and the dwellings of the Indians are clean and comfortable.

Resources and Occupations.—The chief occupation of these Indians is farming, and they are making satisfactory progress. They also work in the lumber camps in the winter, and load vessels and work in the saw-mills in the summer.

Buildings.—Their buildings for the most part are made of logs. Their dwellings and outbuildings are well kept, neat and comfortable, and their houses are fairly well furnished. The Indians of this band are making rapid progress in farming and are using considerable machinery necessary for that purpose, and their farms are fairly well stocked with cattle and horses.

Education.—The school is well attended and fair progress is being made.

Religion.—These Indians are all Roman Catholics. They have a fine large church on the reserve under the auspices of the Wikwemikong priests and are faithful adherents to their faith.

Characteristics and Progress.—These Indians are industrious and law-abiding. Their chief takes a great interest in the management of his band and looks carefully after the interests of his people.

Temperance and Morality.—This band will compare favourably along these lines with any other band in this agency ; very few complaints are made and its standing is satisfactory.

General Remarks.—These Indians are industrious and progressive, take considerable interest in education and agriculture, and the chief appears anxious to assist his band to advance along these lines.

I have, &c.,
JAMES H. THORBURN,
Indian Agent.

PROVINCE OF ONTARIO,
MANITOWANING AGENCY,
MANITOWANING, August 26, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report concerning the Indians of this agency for the year ended June 30, 1901.

WHITEFISH RIVER BAND.

Reserve.—The reserve of this band is situated near the Whitefish river on the north shore of the Georgian bay. It contains an area of about two thousand five hundred acres.

Tribe.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—They have a population of ninety.

Health and Sanitary Precautions.—The health of these Indians for the past year has been good. Sanitary precautions are duly observed and their dwellings are kept clean and well furnished.

Resources and Occupations.—A large portion of the land on this reserve is suitable for farming ; the remainder is woodland. The occupations engaged in by these Indians are : farming, lumbering, hunting, berry-picking, fishing and sugar-making.

Buildings, Stock and Farming Implements.—The buildings are of log and frame construction and are kept in a good state of repair, stock is well cared for, and most of the Indians have all the farm implements they require.

Education.—On this reserve there is one day school, which is fairly well attended, and the children are making good progress in their studies.

Religion.—These Indians are of the Church of England and Roman Catholic persuasions.

Characteristics and Progress.—These Indians are industrious and law-abiding, and are making fair progress.

Temperance and Morality.—In these respects their conduct is very satisfactory.

POINT GRONDIN BAND.

Reserve.—The reserve of this band is located east of Collins inlet, on the north shore of Georgian bay.

Tribe.—These Indians are Ojibbewas.

Vital Statistics.—The population of this band is fifty-nine.

Health and Sanitary Precautions.—The health of these Indians for the past year has been good, and the sanitary condition of their dwellings is quite satisfactory.

Resources and Occupations.—The resources of this reserve are timber, agriculture and fishing. The Indians garden, fish, pick blueberries in the summer, and work in the lumber camps in the winter.

Buildings, Stock and Farming Implements.—They have comfortable log dwellings, have very little stock and very few farming implements.

Education.—They have no school on this reserve, their children attending school at Wikwemikong.

Characteristics and Progress.—As a rule, these Indians are industrious, but they do not devote as much attention to agricultural pursuits as is desirable.

Temperance and Morality.—They are a moral people, and intemperance is rare.

Whitefish Lake Band.

Reserve.—The reserve of this band is situated about twelve miles from Sudbury on the Canadian Pacific railway, where there is a station called Naughton. This reserve has an area of over sixty-eight square miles.

Tribe.—These Indians are of the Ojibbewa tribe.

Vital Statistics.—This band has a population of one hundred and fifty-five.

Health and Sanitary Precautions.—During the outbreak of small-pox in the Sudbury district there were nineteen cases of the disease on this reserve, and quarantine regulations were established over the Indians from January 25 to April 4. There was one death from the disease. The Indians are now in good health, have all been vaccinated and have their dwellings in a sanitary condition.

Resources and Occupations.—The resources of these Indians are gardening and hunting. They garden on a small scale, fish, hunt, act as guides and work in the mining and lumber camps.

Buildings, Stock and Farming Implements.—Nearly all their buildings are constructed of logs, and are kept in a fair state of repair. They have very little stock, and very few farming implements.

Education.—They have two schools on the reserve—one at Naughton, and the other at the village, a distance of about four miles from Naughton. Both schools are fairly well attended and the children are progressing slowly.

Religion.—These Indians are of the Methodist and Roman Catholic persuasions.

Characteristics and Progress.—They are industrious and of the average intelligence, but make no progress in the way of agriculture, the greater portion of them giving their whole time to hunting.

Temperance and Morality.—These Indians are fairly temperate and law-abiding. They are very moral in other ways.

Tahgaiwinini Band.

Reserve.—These Indians have a reserve at Wahnipitae on the north shore of the Georgian bay, but nearly all of the band reside on the unceded portion of Manitoulin island, at and near Wikwemikong.

Tribe.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—This band has a population of one hundred and eighty-eight.

Health and Sanitary Precautions.—The health of these Indians for the past year has been generally good. Sanitary precautions are satisfactorily observed.

Resources and Occupations.—The greater part of the reserve is woodland. The timber on it has been sold under license and a good return secured to the Indians by

the department. General farming, lumbering, fishing and berry-picking are the chief pursuits of this band.

Buildings, Stock and Farming Implements.—The buildings of this band are composed mostly of logs, neatly constructed, comfortable and clean. Their stock is of fair quality, and they have sufficient farming implements for their requirements.

Education.—The children of this band attend school at Wikwemikong.

Religion.—These Indians are all of the Roman Catholic persuasion.

Characteristics and Progress.—They are industrious and law-abiding, and are making steady progress in farming.

Temperance and Morality.—They are fairly temperate and moral in their habits.

Maganettawan Band.

The members of this band who reside within this agency number eighty-three. They live mostly at West bay, on the Manitoulin island, where they successfully farm and garden. In winter they find employment in the lumber camps. This reserve, together with the affairs of its Indians, is under the control of the Parry Sound superintendency.

Spanish River Band, Division No. 3.

The members of this band number three hundred and forty-one. They nearly all reside on the unceded portion of the Manitoulin island, where they successfully farm and garden. Their general measure of advancement is identical with that of the other Indans of the unceded portion of the Manitoulin island, with whom they are included in the agricultural and industrial statistics.

Sucker Lake Band.

Reserve.—The reserve of these Indians is principally situated on the fourth concession of the township of Assiginack, Manitoulin island. The area of the reserve is five hundred and ninety-nine acres.

Tribe.—These Indians belong to the Ojibbewa and Ottawa tribes.

Vital Statistics.—The population on this reserve is fourteen.

Health and Sanitary Condition.—The health of these Indians for the past year has been good. They are clean and tidy and have their homes comfortably furnished.

Resources and Occupations.—Farming is the only occupation engaged in by these Indians.

Buildings, Stock and Farming Implements.—Their buildings are all in good repair, stock is well cared for, and they have an ample supply of farm implements.

Education.—There is no school on this reserve, the children attending school at Wikwemikong.

Religion.—These Indians are all Roman Catholics.

Characteristics and Progress.—These Indians are both intelligent and thrifty. They are law-abiding and peaceable, and their farms compare favourably with those of some of their white neighbours.

Temperance and Morality.—In these respects their conduct is entirely satisfactory.

Sucker Creek Band.

Reserve.—The reserve of these Indians is situated in the northern part of the township of Howland, Manitoulin island, about four miles from the town of Little Current. It has an area of two thousand two hundred acres.

Tribe.—These Indians belong to the Ojibbewa and Ottawa tribes.

Vital Statistics.—This band has a population of one hundred.

Health and Sanitary Precautions.—These Indians have been fairly healthy for the past year. Their dwellings are clean and in a sanitary condition.

Resources and Occupations.—They engage in general farming and stock-raising, and find employment in getting out timber and loading vessels.

Buildings, Stock and Farming Implements.—Their buildings are constructed principally of logs. The dwelling-houses, barns and outbuildings are in a good state of repair, and they continue to advance in their knowledge of farming.

Education.—The children can nearly all read and write. They are quick to learn and attend school regularly.

Religion.—The Indians of this band are adherents of the Church of England. They attend well the church on the reserve, which is in charge of the Church of England missionary at Little Current.

Characteristics and Progress.—The great attention paid to agriculture is the chief reason for the progress shown by the members of this band. Their chief is an intelligent and energetic man who seems honestly and satisfactorily to discharge the duties devolving upon him.

Temperance and Morality.—They are fairly temperate and moral in their habits.

Sheguiandah Band.

Reserve.—This reserve lies in the northwestern part of the township of Sheguiandah. It contains an area of five thousand one hundred and six acres.

Tribe.—These Indians are of the Ojibbewa and Ottawa tribes.

Vital Statistics.—The population of this reserve is eighty-seven.

Health and Sanitary Precautions.—The health of these Indians for the past year has been very good, and sanitary measures are observed by the greater part of the band.

Resources and Occupations.—The principal resource of this reserve is farming.

Buildings, Stock and Farming Implements.—The buildings of these Indians are comfortable and fairly well furnished. Their stock is well cared for, and they have what farming implements are required.

Education.—The school on this reserve is under the supervision of the Church of England. It is competently conducted and the children are making good progress.

Religion.—These Indians are nearly all adherents of the Church of England. They attend regularly the services held in their church by the missionary from Little Current.

Characteristics and Progress.—These Indians may be characterized as being intelligent and thrifty ; they are progressing favourably and are a well-behaved people.

Temperance and Morality.—They are both moral and temperate in their habits.

South Bay Band.

Reserve.—This reserve is situated about twelve miles south of Manitowaning, on the Manitoulin island. One and one-half square miles is about the area of this reserve.

Tribe.—These Indians belong to the Ojibbewa and Ottawa tribes.

Vital Statistics.—This band has a population of sixty-five.

Health and Sanitary Precautions.—The health of these Indians has been good, and sanitary measures have been conformed to.



ABENAKIS OF ST. FRANCIS, QUE. FOUR GENERATIONS: WAWANOLETTE FAMILY.
THOMAS, SON, 65. THOMAS, FATHER, 98. CONRAD, GRANDSON, 28. ALEXANDER, GREAT-GRANDSON, 4.

Resources and Occupations.—The chief resource of this reserve is agriculture. Fishing is also pursued to a small extent, and quite a little revenue is derived from loading vessels and barges in the summer-time.

Buildings, Stock and Farming Implements.—Their dwellings are mostly of logs and are clean and comfortable. Their stock is well cared for ; and their supply of farming implements ample for their requirements.

Education.—These Indians have a school on the reserve, under Roman Catholic supervision. The children attend fairly well and are making as good progress as can be expected.

Religion.—Roman Catholicism is the religion of this band, and the visiting missionary holds regular services on the reserve.

Characteristics and Progress.—On the whole these Indians may be said to be progressing, and their amenity to advice is a commendable characteristic of the band.

Temperance and Morality.—These Indians as a band are not addicted to intoxicants, and the religious influences brought to bear on their morals have not been exerted in vain.

Indians of Manitoulin Island, Unceded.

Reserve.—This reserve comprises the eastern end of the Manitoulin island, east of the township of Assiginack.

Tribe.—These Indians belong to the Ojibbewa and Ottawa tribes.

Vital Statistics.—These Indians number about seven hundred and thirty-six.

Health and Sanitary Precautions.—The health, generally speaking, of these Indians for the past year has been good. The majority of their houses are kept clean and comfortably furnished, sanitary measures are observed and all the dwellings and outbuildings have been whitewashed.

Resources and Occupations.—The resources are large tracts of good land, well adapted for agriculture, timber-land and fishing. These Indians are taking more interest in agricultural pursuits every year. Last winter they took out twenty-five thousand cedar railway ties, eight thousand cedar posts, two hundred and sixty-eight cords of pulp-wood, and twenty thousand feet board measure of cedar saw-logs, all of which the department disposed of for them at a high price.

Buildings, Stock and Farming Implements.—Their buildings are of log and frame construction and are kept in good repair. Their stock is of average quality and well cared for. They are equipped with the most modern farming implements.

Education.—Unsurpassed facilities for education are within the reach of all the children on the reserve. The boys' and girls' industrial institutions, and boys' and girls' day schools at Wikwemikong, are conducted by a well qualified staff of teachers, and there is also a day school at Wikwemikongsing and Buswah village.

Religion.—These Indians are all Roman Catholics, and the influence of the missionaries is a great factor in the advancement of this band.

Temperance and Morality.—Troubles caused by the use of intoxicating liquor have been few during the year, and as a rule the morality of the Indians is good.

I have, &c.,

C. L. D. SIMS,
Indian Agent.

PROVINCE OF ONTARIO,
MISSISSAGUAS OF ALNWICK,
ROSENEATH, August 15, 1901

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my report and statistical statement in connection with the Alnwick Indians for the year ended June 30, 1901, and to my last report I have little to add.

Reserve.—This reserve is in the township of Alnwick, in the county of Northumberland, and contains three thousand three hundred and seventy-three and two one-hundredths of an acre, of which about two thousand four hundred and seventy-three acres are cleared, and about one thousand acres under lease to white men. The greater part of this reserve is good land and well adapted for farming.

Vital Statistics.—There are now two hundred and thirty-one in the band, being the same number as last year. There were eight births and eight deaths during the year, three women were married into the band, one out, and two young women were enfranchised.

Health and Sanitary Precautions.—There is very little sickness in the band at the present time, but we have lost four since I took the census this last spring ; one of these was ex-chief Mitchell Chubb, who was chief for twelve years and for several years one of the councillors. He was a good man, of a good moral character, and will be a great loss to the members of the band in general.

Dr. Lapp vaccinated a large number of the Indian children during the past spring with good success, though a large number of the Indians have a great horror of being vaccinated.

Resources and Occupations.—This reserve being in a good agricultural district, many of the Indians have very good success in farming and succeed as well as do many of the white men in the immediate neighbourhood. There is now but little to be made in fishing and hunting in this section of the country.

Buildings, Stock and Farm Implements.—Nearly all the buildings are frame, and in general are kept in a good state of repair. The Indians own a large number of stock as well as agricultural implements. They have four self-binders, but there is not a reaper on the reserve.

Education.—Miss Wilhelmina Peters taught the school from the holidays in the year 1900 until Christmas, and after that Mr. Wm. Garland taught it until the holidays of the present year. Both were good teachers, and I think Miss Peters was especially well liked by the Indians. Mr. C. B. Oakley will now take charge of the school. Those children who could be induced to attend at all regularly have done fairly well. John Lukes, one of the boys of this school, attended the school at Roseneath after Christmas last winter and this summer passed the entrance examination very creditably indeed.

Characteristics and Progress.—Many of the Indians are industrious and are doing fairly well. The whole reserve has been very much improved during late years by the building of good straight cedar rail fences, which reflect credit upon those who have built them.

Religion.—There are two hundred and twenty-two Methodists, seven Anglicans and two Roman Catholics in the band, and the greater number of them attend services quite regularly. The Rev. Wm. Tomblin, who has been the missionary here for the last five years, has retired, and Mr. Oakley will take charge.

Temperance and Morality.—A number of the Indians will take liquor whenever they can get it, but the large majority never taste it and consider it a disgrace for others to do so.

I have, &c.,

J. THACKERAY,

Indian Agent.

PROVINCE OF ONTARIO,
MISSISSAGUAS OF THE CREDIT,
HAGERSVILLE, September 24, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Mississaguas of the New Credit reserve, for the year ended June 30, 1901.

Reserve.—The reserve is situated partly in the township of Tuscarora, county of Brant, and partly in the township of Oneida, county of Haldimand. It comprises six thousand acres, of which four thousand eight hundred are in the township of Tuscarora, and the remaining one thousand two hundred are in the township of Oneida. This reserve is adjacent to and lies to the south and east of the Grand River reserve.

Vital Statistics.—The population of the band is two hundred and forty-six, consisting of sixty-eight men, seventy-six women, fifty-nine boys and forty-three girls, a decrease of two since the last annual report.

Health and Sanitary Precautions.—The health of the Indians throughout the year was exceptionally good. An outbreak of small-pox on the adjoining reserve of the Six Nation Indians was for a time the source of considerable fear and anxiety, but a thorough system of vaccination and a rigid quarantine against the infected district prevented that much dreaded disease from gaining a foothold on this reserve. The schools and public buildings are kept scrupulously clean. The houses and yards are generally neat and well kept, and sanitary regulations are fairly well observed.

Education.—There is a good brick school-house, well equipped and ventilated, with a spacious play-ground adjoining. The course of study is the same as that prescribed by the Department of Education for Ontario. The discipline is good, and the pupils are making satisfactory progress under the present teacher, Miss M. G. Bogle. Three pupils from this reserve are attending the high school in the village of Hagersville.

Religion.—There are two Methodist churches on the reserve, both of which are under the charge of Rev. C. G. F. Cole, an energetic young man who takes a deep interest in the welfare of the people of his pastorate. Both churches are well attended. The Seventh Day Adventists have a few followers among the members of the band.

Characteristics and Progress.—These Indians are industrious, law-abiding and intelligent. They are making satisfactory progress along educational lines, and in agricultural pursuits, although the fall wheat for 1901 was a partial failure owing to the prevalence of the Hessian fly. The loss was more than counterbalanced by the abundant hay and spring crop. The labour of the Indian is in much demand among

the farmers of the surrounding district and the fruit-growers of the Niagara peninsula. By taking advantage of these opportunities the incomes of many families are often supplemented by a considerable sum.

Temperance and Morality.—These Indians are, generally speaking, temperate and moral, but few indulge in alcoholic beverages. In these virtues they will compare very favourably with their white neighbours.

General Remarks.—All the members of the band speak and nearly all can read and write the English language intelligently.

The public buildings are of such a character that they are a credit to the band and would do honour to the intelligence of a more pretentious people.

As I have been agent for but a brief portion of the fiscal year, this report may not be as complete as it should be, were I in office for the whole year.

I have, &c.,

DANIEL J. LYNCH,

Indian Agent.

PROVINCE OF ONTARIO,
MISSISSAGUAS OF RICE AND MUD LAKES,
KEENE, July 2, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of Indian affairs in my agency for the year ended June 30, 1901.

RICE LAKE BAND.

Reserve.—The Rice Lake reserve is located on the north shore of Rice lake in the township of Otonabee, county of Peterborough. It contains about seventeen hundred and fifty acres of land, of which about seven hundred and fifty acres are cleared ; about two hundred and forty acres of this is under lease to white tenants, while the locatees cultivate the remainder of said cleared land.

Vital Statistics.—The total number shown by the present census is eighty-one, composed of twenty-two men, twenty-one women, and thirty-eight young people under twenty-one years of age. During the past year there were two births, one joined the band by marriage, and there were two deaths—an increase of one since last report.

Health and Sanitary Precautions.—The health of the Indians, generally speaking, has been fairly good. They seem very comfortable in their homes, and keep their premises remarkably clean.

Resources and Occupations.—The resources of this band are trapping, gathering wild rice, basket-making, some go to the lumber camps and drives in summer.

Buildings.—The buildings on this reserve, with few exceptions, are frame and are kept in a good state of repair.

Stock and Farming Implements.—The stock is good, and the Indians possess a lot of agricultural implements.

Education.—Some of the children here attend school very regularly, and appear to be learning fairly well.

Religion.—The members of this band are all Methodists ; they have one church, and Mr. Windsor, a missionary, preaches to them every Sabbath evening. They have

a Christian Endeavour meeting every week, in which some of the members of the band take quite an interest.

Temperance and Morality.—On the whole, these people are law-abiding and well behaved, although there are a few who indulge in strong drink occasionally.

Mud Lake Band.

Reserve.—This reserve is located on Mud lake in the township of Smith, county of Peterborough. It contains about two thousand acres.

Vital Statistics.—The total number shown by the present census is one hundred and sixty-five, composed of forty-five men, thirty-six women, and eighty-four young people under twenty-one years of age. During the past year there were five births, six deaths, two joined the band by marriage, and one member of this band has joined another band by marriage, leaving the number in the band the same as last year.

Health and Sanitary Precautions.—There has been a good deal of sickness among these Indians during the past year, chiefly consumption. The children have been vaccinated, sanitary measures are well observed, whitewash is freely used, the houses present a clean and tidy appearance and every precaution is taken to prevent contagion.

Resources and Occupations.—In agricultural pursuits these Indians are making steady improvement, a few of them working all their holdings and are doing fairly well. A good many of them work in lumber camps in the winter and get good wages.

Buildings.—The buildings on this reserve are of log and frame, and are kept in good repair.

Stock and Farming Implements.—The stock is fair indeed, and quite a number of the Indians are well supplied with implements.

Education.—There is one school on this reserve. The present teacher is an Indian. Very fair progress has been made.

Religion.—The members of this band are all members or adherents of the Methodist church. A minister comes to the reserve every Sabbath, and they all attend services very regularly.

Characteristics and Progress.—These people on the whole are industrious and appear to take a great interest in their homes.

Temperance and Morality.—The Indians here appear very honest and well behaved, there being very little intemperance in the band.

I have, &c.,

WM. McFARLANE,
Indian Agent.

Province of Ontario,
Mississaguas of Scugog,
Port Perry, August 21, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I beg to submit my annual report of the Mississaguas of Scugog island, for the year ended June 30, 1901.

Reserve.—The reserve contains an area of eight hundred acres, the greater part of which is cleared and under cultivation.

Vital Statistics.—There is a population of thirty-seven, a decrease of one since last year. There has also been one birth.

Sanitary Conditions.—The sanitary condition is very good and the death of the two oldest men of this band during the past year may be said to have been caused by old age.

Resources and Occupations.—Their chief sources of income are basket-making, fishing and hunting, although some of them are fairly industrious farmers.

Buildings and Farm Implements.—There are a few well-built frame buildings, but although very much in need of it, the log houses have not been improved since the report of last year.

Education.—There is school within convenient distance of the children of this agency, and although the attendance of all is not as regular as it should be, the progress made by the faithful few is very good.

Religion.—The greater number of the Scugog Indians are members in good standing of the Methodist church on the reserve.

Characteristics and Progress.—They are honest, thrifty, law-abiding and some of them are anxious to get the necessary implements to cultivate their land to better advantage.

Temperance and Morality.—The Mississaguas may be called a temperate band, and although a few of the young men indulge in intoxicants, the majority give practical proof of their temperance principles.

I have, &c.,

A. W. WILLIAMS,
Indian Agent.

PROVINCE OF ONTARIO,
MOHAWKS OF THE BAY OF QUINTE,
MARYSVILLE, August 3, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report, for the year ended June 30, 1901.

Reserve.—The Tyendinaga reserve is situated in the county of Hastings and is said to contain an area of seventeen thousand acres.

Vital Statistics.—The population is twelve hundred and sixty-five, consisting of three hundred and twenty-nine men, three hundred and sixty-three women and five hundred and seventy-three young people under twenty-one years of age.

Health and Sanitary Precautions.—The health of the Indians during the year has been generally good. The greater number of the young people had mumps and measles. During the year there were six cases of typhoid fever in one family. Precautions as to cleaning up yards and burning refuse have been taken, and premises have been cleaned up generally. About three hundred young people have been vaccinated.

Resources and Occupations.—General farming and stock-raising are the chief means of making a living, as the land is fertile and well adapted for mixed farming. A few depend upon their labour and trades, such as carpentry, masonry, and fishing. The crops, especially hay, for the past year were not as good as the preceding year. Many of the women engage in gardening and butter-making.

Buildings and Stock.—The Indians are taking more interest in improving their barns for the better protection of their stock and crops during the winter.

Education.—There are four schools on the reserve under the management of a school board. There are two white and two Indian teachers employed. Two hundred and forty-eight children between the ages of six and fifteen should attend school, but a difficulty is experienced in securing a regular attendance in a few cases. A number of the children attend the high school at Deseronto.

Religion.—The Indians of this band belong to the Church of England, except one hundred and forty, who are Presbyterians. The Anglicans have two stone churches and two mission-houses used for divine service. The missionary conducts four services each Sunday and an evening service during winter. One service at the mission school is conducted by Cornelius Maracle, sr. The Presbyterians have one frame church. The Indians are attentive to their religious duties and in all matters appertaining to religion.

Characteristics and Progress.—The Indians are gradually improving their farms by additional improvements in buildings, fences and draining. The road-work, under the direction of seventeen path-masters, who are appointed by the chiefs in council annually, was well attended to and the roads kept in good condition, also the chiefs are encouraging the draining of swamps and stagnant waters by having large ditches constructed.

About thirty young men joined the volunteers and drilled at Kingston during July, 1901.

Dr. Oronhyatekha has imported some pure-bred stock, consisting of horses, cattle and swine.

Temperance and Morality.—The ability of these Indians to abstain from strong drink is remarkable ; very few are in the habit of drinking to excess.

Their morals are good so far as I am able to judge.

I have, &c.,

GEORGE ANDERSON,
Indian Agent.

PROVINCE OF ONTARIO,
MORAVIANS OF THE THAMES,
DUART, August 9, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Moravians of the Thames for the year ended June 30, 1901.

Reserve.—This reserve contains about three thousand and ten acres of good land, and is situated on the River Thames in the northern portion of the township of Orford, in the county of Kent, about four miles southwest of the town of Bothwell.

Tribe.—These Indians belong to the Delaware tribe, but are known as the 'Moravians of the Thames.'

Vital Statistics.—There are three hundred and five persons belonging to this band : eighty-four men, seventy-six women, seventy-four boys, and seventy-one girls. There have been nine births and six deaths during the year among the members of the band. There are also forty-one non-members who reside here. Two of their number died during the year.

Health and Sanitary Precautions.—The health of these Indians upon the whole has been good during the year. There was an epidemic of chicken-pox among the children for about four months. The sanitary regulations of the department are well observed. Vaccination of the children is done yearly. Whitewash is freely used on their dwellings inside and out. Wells are being put down and better water is obtained, which is of material advantage to the health of the Indians.

Resources and Occupations.—They live nearly altogether by farming. The land is fertile and easily worked, and nearly all young men of twenty-one years of age are possessed of more or less land. Those who have not enough to keep them at home all the time work for neighbouring white men. A few engage in fishing, while some others make baskets.

Buildings.—As a general thing the houses are small, but are built more comfortably than heretofore, and are kept fairly clean. The stables and outbuildings have been much improved lately.

Stock.—The stock, especially horses and hogs, are good. The Indians pay more attention to these than to cattle and sheep.

Farming Implements.—They use all modern implements in so far as they are able to procure them.

Education.—The school, which is situated near the centre of the reserve, where all the children can attend, is taught by Miss Mary Jane Smith, who is a professional teacher and doing excellent work. The progress made by the pupils who attend regularly is very good.

Religion.—There are three churches upon the reserve, viz., the Moravian mission, the Methodist and the Anglican ; and services are conducted in each, every Sabbath, and well attended.

Temperance and Morality.—The greater part of the Indians are temperate, occasionally we hear of cases of intemperance. No cases of immorality have been brought to my notice during the last year, and think that upon the whole the Indians are making steady progress.

I have, &c.,

A. R. McDONALD,
Indian Agent.

PROVINCE OF ONTARIO,
OJIBBEWAS OF LAKE SUPERIOR, WESTERN DIVISION,
PORT ARTHUR, September 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning the Indians of this agency, for the year ended June 30, 1901.

FORT WILLIAM BAND.

Reserve.—The reserve is situated along the Mission and Kaministiquia rivers, and contains an area of thirteen thousand and forty acres. The land along the rivers is of good quality, the building of the Mountain road has opened up about two thousand acres of excellent land which formerly was inaccessible.

Tribe.—This band belongs to the Ojibbewa tribe.

Vital Statistics.—The population is two hundred and ninety-seven, consisting of sixty-three men, eighty-seven women, seventy-nine boys and sixty-eight girls. During the year there were five births and fifteen deaths.

Health and Sanitary Precautions.—During the year there was an epidemic of measles, which is responsible for the majority of deaths. The prevalence of small-pox among the Indians across the international boundary made it necessary to use every precaution to prevent infection ; rubbish has been burned, buildings whitewashed, and vaccinations performed where necessary.

Resources and Occupations.—The chief occupations of the band in summer are farming, acting as guides, exploring for minerals and picking berries ; in the winter, cutting cord-wood and working in lumber camps ; the building of the Mountain road furnished work for a large number during the spring.

Buildings.—Two new buildings were erected during the year.

Stock.—There have been few additions to the number of stock.

Farming Implements.—The purchase of a mower by one of the band makes it unnecessary for the Indians to hire any outside machinery.

Education.—There are two schools on the reserve, the Indian boys' and girls' day school, and the St. Joseph's Orphanage. The teachers are Sisters of St. Joseph. The progress of the pupils is fair, and if more interest were shown by parents, results would be better.

Religion.—There are two hundred and thirty-seven Roman Catholics, and sixty pagans in this band. There is a church on the reserve, which is well attended, and a convent in charge of the Rev. Mother Superior and four sisters.

Characteristics and Progress.—The Indians, as a rule, are industrious, but prefer working in the woods to tilling the soil. As there has been plenty of the former at good wages, the band has had a prosperous year.

Temperance and Morality.—In both of these respects there seems to be a steady improvement.

Red Rock Band.

Reserve.—The reserve of this band is situated on the Nipigon river, near Lake Helen, and contains six hundred acres.

Tribe.—These Indians are of the Ojibbewa tribe.

Vital Statistics.—The population is two hundred and fifteen, consisting of forty-nine men, fifty-five women, fifty-nine boys and fifty-two girls. There were six births and nine deaths during the year.

Health and Sanitary Precautions.—The health of the band has been good. There was an epidemic of measles, but the consequent mortality was small. There were a number of vaccinations. All rubbish is burned.

Resources and Occupations.—The principal occupation of the Indians is acting as guides to the tourists who go up the Nipigon river fishing ; some cultivate small patches of land ; during the winter they engage in hunting and lumbering.

Buildings.—There were no new buildings erected this year. The Indians are well and comfortably housed.

Stock.—Some members of the band own good horses. During the winter they contract for freighting supplies to the camps and up to the lake.

Farming Implements.—The individual members of the band who engage in farming have all the necessary implements.

Education.—There is a school-house on the reserve, which has been closed for a number of years. There is also one at the Roman Catholic mission, which has a fair attendance.

Religion.—Of this band thirty-nine are Anglicans, and one hundred and seventy-six Roman Catholics. The Indians are greatly interested in their religions, and mass at the mission is well attended.

Characteristics and Progress.—The Indians of this band are industrious and make a comfortable living. They are peaceable and law-abiding.

Temperance and Morality.—There could be an improvement made in both these respects.

Church of England Mission.

Reserve.—This reserve is occupied by a portion of the Red Rock band, and is situated on the west shore of McIntyre's bay, Lake Nipigon, and contains five hundred and eighty-five acres.

Population.—About thirty persons reside here.

Resources and Occupations.—The occupations of this portion of the band are hunting and fishing.

Buildings.—Two new buildings were erected during the year.

Stock.—These Indinas own no stock, the bull furnished by the department has been lost.

Characteristics and Progress.—They are a law-abiding community. Some slight improvements have been made during the year and a small quantity of new land broken with the new implements supplied by the department.

Nipigon Band.

Reserve.—The principal reserve of this band is situated on Gull bay, Lake Nipigon, and consists of seven thousand five hundred acres. It is well wooded along the banks of the Gull river, which runs through it. The soil is light. There is another reserve on Jackfish island, near the Hudson's Bay Company's post.

Tribe.—These Indians are of the Ojibbewa tribe.

Vital Statistics.—This band numbers five hundred and seventeen, consisting of one hundred and one men, one hundred and twenty-seven women, one hundred and fifty-five boys, and one hundred and thirty-four girls. There were fourteen births and fifteen deaths during the year.

Health and Sanitary Precautions.—The health of this band has been good. A number were vaccinated.

Resources and Occupations.—Hunting is their principal occupation, some act as guides to the tourists who fish in the Nipigon. During the past year a great many have been employed by explorers.

Buildings.—Three new buildings were erected this year.

Farming Implements.—Some farming implements were supplied the band this spring.

Education.—The school, which is situated on Jackfish island, was closed owing to poor attendance.

Religion.—Of this band seventeen are Anglicans, one hundred and seventy-six Roman Catholics, and three hundred and twenty-four pagans. There is a church at Jackfish island, where mass is celebrated occasionally.

Characteristics and Progress.—These Indians are industrious and are beginning to realize the necessity of engaging in agriculture, as fur-bearing animals become scarcer each year. They made very good use of the implements supplied by the department last spring.

Temperance and Morality.—They are far removed from places where intoxicating liquors can be obtained; and appear to be of good morals.

Pays Plat Band.

Reserve.—This reserve is situated on the Pays Plat river, Lake Superior, and contains six hundred and forty acres.

Tribe.—These Indians belong to the Ojibbewa tribe.

Population.—The population is forty-five, consisting of five men, fourteen women, fourteen boys and twelve girls. There were two deaths and no births this year.

Health and Sanitary Precautions.—There has been very little sickness. The reserve is kept quite clean.

Resources and Occupations.—The occupations of these Indians are hunting, fishing, exploring for minerals, and working at mining. They raise enough potatoes and vegetables for their own use, and sell large quantities of blueberries.

Education.—There is a school on the reserve, which at present is without a teacher. The parents take very little interest in having their children educated.

Religion.—All the members of this band are Roman Catholics. There is a church on the reserve, where mass is held occasionally.

Characteristics and Progress.—These Indians are fairly industrious and as work is more plentiful than formerly they are progressing a little.

Temperance and Morality.—Intemperance and immorality are rare.

Pic Band.

Reserve.—This reserve is situated on the Pic river, Lake Superior, and contains eight hundred acres, divided into twenty-five farms fronting on the river.

Tribe.—They are of the Ojibbewa tribe.

Vital Statistics.—The population is two hundred and twenty, consisting of forty-nine men, fifty-eight women, sixty boys, and fifty-three girls. There were eight births and six deaths during the year.

Health and Sanitary Precautions.—The health of the band generally has been good. All refuse is burned and the reserve kept in a clean condition.

Resources and Occupations.—These Indians do considerable farming. They also engage in hunting, fishing, and exploring. They sell large quantities of blueberries.

Buildings.—One new building was erected during the year.

Stock.—These Indians have never taken much interest in acquiring stock. They have a horse supplied by the department.

Farming Implements.—They have implements sufficient for the amount of land cultivated.

Education.—There is a school on this reserve, which is well attended. The parents take a good deal of interest in school affairs.

Religion.—Of this band five are Anglicans, and two hundred and fifteen are Roman Catholics. There is a church on the reserve, where mass is held occasionally.

Characteristics and Progress.—They are quiet and fairly industrious, but there is not much outside work, and their progress is slow.

Temperance and Morality.—In these respects they are above the average.

LONG LAKE BAND.

Reserve.—This reserve is situated on the shore of Long lake and contains six hundred and forty acres.

Tribe.—They are of the Ojibbewa tribe.

Vital Statistics.—The population is three hundred and twenty-six, consisting of sixty-one men, eighty-one women, eighty boys, and one hundred and four girls. There were sixteen births and seven deaths during the year.

Health and Sanitary Precautions.—The health of the band has been good. A number of vaccinations were performed.

Resources and Occupations.—This is a hunting band, the only other occupation being the transportation of merchandise from Lake Superior for the Hudson's Bay Company ; some few were engaged by explorers for the first time this year.

Education.—There has never been a school on this reserve. The Indians are anxious that one be established.

Religion.—Of this band sixty are Anglicans, two hundred and sixty-five are Roman Catholics, and there is one pagan. There is a Roman Catholic church on the reserve, where mass is celebrated occasionally.

Characteristics and Progress.—These Indians are industrious and intelligent, and are showing some interest in cultivation. The implements given them by the department will be a great encouragement.

Temperance and Morality.—The morality of this band is good. They are so far removed from where liquor is sold that they have no chance to indulge.

I have, &c.,
J. F. HODDER,
Indian Agent.

PROVINCE OF ONTARIO,
PARRY SOUND SUPERINTENDENCY,
PARRY SOUND, August 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report and statistical statement showing the condition and progress of the various bands in this superintendency for the year ended June 30, 1901.

PARRY ISLAND BAND.

Reserve.—The reserve of this band is situated on the eastern shore of the Georgian bay, near the town of Parry Sound. It contains an area of twenty-seven square miles.

Resources.—The resources of this reserve are agriculture, hunting and fishing. The lumbering operations of several large concerns at Parry Sound together with the works in connection with the Canada Atlantic railway at Depot Harbour located on the reserve, enable the members of this band to secure employment at almost any time they may desire it.

Tribe or Nation.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this reserve (exclusive of those Indians residing on the reserve who do not belong to the band) is one hundred and seven, consisting of twenty-six men, thirty-four women, and forty-seven children. During the year there were two births and one death, making a total increase in the number of persons in the band of one for the year.

Health.—The health of the Indians of this band for the year has been good, only one death being recorded during the year.

Occupations.—The members of this band have exceptional means of earning a livelihood. Besides their agricultural pursuits, which are gradually being improved, they secure considerable employment acting as guides to tourists who visit the adjacent summer resorts during the season ; and in winter they can secure work in the lumbering camps located within easy reach of the reserve.

Buildings and Stock.—The improvements in these are not as noticeable as I would wish. There is, however, one very good farm on the reserve owned by James Walker, a former member of the Cape Croker band, but who now belongs to Parry Island band, and I am endeavouring to induce the other members of the band to emulate this Indian in their agricultural pursuits.

Education.—The educational affairs of this band are in a fairly satisfactory condition. There are two schools on the reserve each taught by a female teacher holding a third-class certificate. There are twenty-five children of school age on the reserve, besides those children residing on the reserve who do not belong to the band, some of whom attend school, so that the attendance has been fairly good during the past year. The progress of the pupils has been as good as could be expected.

Religion.—The religious denominations are represented in this band as follows : forty-nine Methodists, thirty-six Roman Catholics, and twenty-two pagans. The Methodists have a very good church on the reserve, and the services, which are conducted by the Rev. Allan Salt, the resident missionary, are usually well attended. The Roman Catholics receive occasional visits from one of their clergy ; the services at such times being held in the Skene school-house.

Characteristics.—The Indians of this band are a very well behaved and law-abiding people, and morally they stand very high.

Temperance.—There has only been one case of intemperance reported to me among the members of this band during the past year ; so in this respect their conduct has been very good.

Shawanaga Band.

Reserve.—This reserve is situated about four miles inland from the eastern shore of Shawanaga bay, on the east side of Georgian bay, and twenty-three miles north of the town of Parry Sound. It contains an area of fourteen square miles.

Resources.—The resources of this reserve comprise : farming, which, however, is not carried on to any great extent, fishing, and the gathering and selling of wild fruit, &c.

Tribe or Nation.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—This band has a population of one hundred and five, consisting of twenty-four men, thirty-four women and forty-seven children. During the year there have been two births and three deaths, making a total decrease for the year of one.

Health.—The health of this band for the past year has been fairly good.

Occupations.—Farming to a limited extent forms a part of the occupation of this band. Fishing and hunting is, however, the means adopted by most of them in earning a living. The Buffalo Fish Company, which has a depot at Point Aux Barils, employs quite a few of the members of this band in the capacity of fishermen, at which they make good wages.

Buildings.—The buildings of this band are small and of an inferior type. Most of them are built of logs and of such dimensions that they do not allow of the proper housing of the occupants.

Education.—The children of this band are taught in a school-house on the reserve where the exercises are conducted by a female teacher holding a third-class certificate. The course of studies is that authorized by the department. The number of children of school age is twenty-four. The progress of the pupils during the past year has been very fair.

Religion.—The religious denominations are represented in this band as follows :—seventy-five Methodists and thirty Roman Catholics. There are two churches on the reserve ; the one belonging to the Methodists, which is now completed, being a very creditable structure ; the other, belonging to the Roman Catholics, is not near completion yet. Services have frequently been held in the new Methodist church and they have been well attended.

Characteristics.—The Indians of this band, while not as industrious, collectively, as they might be, appear to be a bright and intelligent body of people. A few of them do exceptionally well in their employment of fishing for the Buffalo Fish Company, at Point Aux Barils, and if more of the band would apply themselves to work, they would all be able to earn a fair living.

Temperance and Morality.—I am pleased to be able to say that no case of intemperance among the band has been reported to me during the past year. Their moral conduct has also been of a high order.

Henvey Inlet Band.

Reserve.—This reserve is situated on one of the arms or inlets of the Georgian bay, almost midway between Byng inlet and French river. It contains an area of thirty square miles.

Tribe or Nation.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—This band has a population of one hundred and sixty-five, consisting of forty-seven men, fifty-three women and sixty-five children. During the year there have been six births and six deaths, which makes the population exactly the same as last year.

Health.—The health of this band for the past year has been fairly good.

Resources and Occupations.—The resources of this reserve are agriculture, fishing and hunting. The members of this band engage in farming only to a limited extent. Fishing, hunting and working in the lumber camps in the vicinity of the reserve are the means adopted by most of them in earning a living.

Education.—The number of children of school age on this reserve is thirty-four. There is one school on the reserve conducted by a female teacher holding a third-class certificate. The course of studies is that authorized by the department. The attendance and discipline are very good, and the pupils are making very good progress in their studies.

Buildings and Agricultural Implements.—The buildings belonging to the members of this band are of a very fair order, their dwelling-houses being whitewashed and kept in a very neat condition. Their village is located on a high and picturesque bluff, and I think, taking their houses collectively, they form the most creditable group of Indian houses in this superintendency.

Their agricultural implements are few in number, comprising three ploughs and a harrow.

Religion.—Nearly three-fourths of the members of this band are Roman Catholics, the remainder being Methodists. A very good Roman Catholic church is now com-

pleted, and services are occasionally held in it by the missionary priest who resides at Byng inlet. The Methodists have also erected a very good church, and services are frequently held in it by visiting clergy.

Characteristics.—The members of this band are of a superior character. They are a stalwart body of men and their appearance indicates constant industry.

Temperance and Morality.—Their conduct in both of these respects has been, during the past year, all that could be desired.

Nipissing Band.

Reserve.—The reserve belonging to this band is situated on the north shore of Lake Nipissing, ten miles west of the town of North Bay. It contains an area of sixty-four thousand acres.

Vital Statistics.—This band has a population of two hundred, consisting of forty-seven men, fifty-nine women and ninety-four children. During the year there were five births and five Indians joined the band, there were five deaths and three Indians left the band, making a total increase in the number of persons comprising this band of two for the year.

Health.—The health of the members of this band for the past year has been good.

Resources and Occupations.—The resources of this reserve are agriculture, hunting and lumbering. The members of this band have exceptional means of earning a living. The reserve being located near a divisional point of the Canadian Pacific railway, together with the lumbering operations which are being constantly carried on by Mr. J. R. Booth on the reserve, enables them to secure employment at almost any time they may desire it.

Education.—There are forty-four children of school age on the reserve. They have an excellent school situated at their village at Beaucage bay, where the school is presided over by a female teacher holding a third-class certificate. The attendance is good and the progress of the pupils quite satisfactory.

Religion.—The members of this band are all Roman Catholics. They have a good church on the reserve, where services are conducted occasionally by visiting missionaries.

Characteristics.—The Indians belonging to this band are a smart and intelligent body of people and in numerous respects compare favourably with many of the white settlers in this district. Their farming operations are carried on only to a limited extent, as they depend largely on securing employment in the lumbering camps and hunting as a means of earning a living.

Temperance and Morality.—As no cases of intemperance have been reported to me during the past year among the members of this band, I conclude that their conduct in this respect has been very good ; while morally they stand very high.

Dokis Band.

Reserve.—The reserve belonging to this band is situated at the outlet of Lake Nipissing, at the head of the French river. It contains an area of about twenty-five thousand acres, consisting of two islands.

Tribe or Nation.—These Indians nominally belong to the Ojibbewa nation, but in reality they are half-breeds with a large admixture of French blood.

Vital Statistics.—The population of this band is seventy-nine, consisting of eighteen men, twenty-six women, and thirty-five children. During the year there was one birth and two deaths, making a total decrease of one in the number of persons comprising this band for the year.

Health.—The health of this band for the year has been good.

Resources and Occupations.—The resources of this reserve at present appear to be very limited. Agriculture is carried on in a very limited manner and the Indians also work in the lumber camps. This band has located on its reserve a very valuable tract of pine timber, which, if disposed of, as it could easily be to great advantage, would place the members in a very prosperous condition. At present most of them are in very indigent circumstances and are likely to remain so as long as the present policy pursued by them regarding their timber exists.

Buildings, Stock and Farming Implements.—The buildings of this band are few in number and built of logs.

The stock and farming implements are owned almost entirely by Chief Dokis and his sons.

Education.—There are no educational facilities on this reserve whatever, consequently the children are growing up without the advantages which education gives, which is much to be deplored.

Religion.—The Indians belonging to this band are all Roman Catholics. They have no church.

Characteristics.—The characteristics of these Indians are largely French. They appear to be of average intelligence, and should be in a more prosperous condition but for the refusal of their chief to consent to the sale of their timber for their benefit.

Temperance and Morality.—In these respects their conduct is all that could be desired.

Temogaming Band.

Reserve.—No reserve has yet been given to this band. Its members live around the shores of Lake Temogaming ; a considerable number of them residing on Bear island, adjacent to the Hudson's Bay Company's post. Lake Temogaming is situated about forty miles west of Lake Temiscaming.

Resources and Occupations.—Almost the only resource of this band is hunting, and this means of earning a living is rapidly decreasing. There is excellent fishing in the lakes and streams which abound in this district, but fishing is carried on only to a limited extent. They make very little attempt at farming, giving as a reason that as no reserve has been assigned to them, they do not care to clear up land which might afterwards be placed outside the bounds of their reserve.

Tribe or Nation.—The Indians of this band are pure Ojibbewas.

Vital Statistics.—The population of this band is eighty-six, consisting of twenty-one men, thirty-six women and twenty-nine children. During the year there have been three births, and, as no deaths have been recorded, the population has increased by three over that of last year.

Health.—The health of this band for the past year has been very good.

Buildings.—Around the Hudson's Bay Company's post, on Bear island, a few houses have been erected ; but the majority of the members of this band live in tents all the year round.

Education.—There are no facilities for education for the members of this band, consequently the children belonging to it are growing up without any of the advantages which education gives.

Religion.—This band is composed entirely of Roman Catholics. A church is in course of erection near the Hudson's Bay post, but owing to the inaccessibility of Temogaming from the outside world, I do not see how services are to be conducted in this edifice when completed, except at long intervals.



DAY SCHOOL ON ABENAKIS RESERVE, ST. FRANCIS, QUE.

Characteristics.—The members of this band appear to be of an unusually hardy character, which is proved by the arduous work they perform in portaging and with the paddle, at both of which they excel.

Temperance and Morality.—In these respects their conduct is entirely satisfactory.

Watha Band (formerly Gibson).

Reserve.—This reserve is situated between the southern end of Lake Muskoka and the Georgian bay. It contains an area of twenty-five thousand acres.

Tribe or Nation.—These Indians are Mohawks, or as they are more generally known, Iroquois. They were originally residents of Oka, Quebec.

Vital Statistics.—This band has a population of one hundred and thirty, consisting of thirty-two men, twenty-seven women and seventy-one children. During the year there were seven births and no deaths, making a total increase in the number of persons comprising the band, of seven for the year.

Health.—The health of this band during the past year has been very good.

Resources and Occupations.—The resources of this reserve are agriculture and lumbering. The members of this band depend chiefly on farming for a living. During the winter months some of the younger men find occasional employment in the lumber camps in the vicinity of the reserve, and in summer some of them act as guides to tourists, who frequent the Muskoka lakes in large numbers.

Buildings.—The buildings belonging to the members of this band are superior to those found on any of the other reserves in this superintendency.

Education.—There is one school on this reserve, conducted by a male teacher holding a third-class certificate. The number of children of school age is thirty-five. The school is under the supervision of the Methodist Missionary Society, and very fair progress is being made in the education of the children.

Religion.—There are three religious denominations represented in this band, consisting of one hundred and twenty Methodists, nine Roman Catholics and one Plymouth Brother. A Methodist missionary, in the person of the school teacher, is stationed on the reserve, and regular services are held in the church, which are well attended by the adherents of this denomination.

Characteristics.—This band may be considered the most industrious and progressive of any in this superintendency, which is largely due to the interest taken in farming.

Temperance and Morality.—The conduct of this band in these respects is of an exceptionally high order and leaves nothing to be desired.

Maganettawan Band.

Reserve.—This reserve is situated about five miles from the mouth of the Maganettawan river. It contains an area of eight thousand six hundred and seventy acres.

Tribe or Nation.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—There are only twenty-seven members of this band who reside permanently on the reserve ; the remainder reside on the Manitoulin island. The population of the reserve consists of six men, eight women and thirteen children. During the past year there has been one birth and one immigration recorded, making an increase in the total number of persons comprising the band of two for the year.

Health.—The health of the resident members of this band for the past year has been very good, no deaths having been recorded.

Resources and Occupations.—The resources of this reserve are farming in a small way, hunting and fishing. The members of this band engage in farming in a small way. Their reserve lies adjacent to the lumber mills of the Messrs. Holland and Graves Company, at Byng inlet, which enables them to secure employment at any time they may desire it, so that if they want work, they can easily earn a very fair living.

Buildings and Stock.—As the population of the resident members of this band is small, their buildings are of course in proportion, and consist of two dwellings, two stables and two other buildings. Their live stock is fairly numerous for the population of the reserve.

Education.—There is no school on this reserve. The children who attend school do so at Byng inlet, about two miles distant from the reserve, where there is a large and well-conducted school.

Religion.—The members of this band are all Roman Catholics. They have no church, as the population of the reserve is too small to build and support one.

Characteristics and Temperance.—The Indians of this band are an industrious and well-behaved people, and are as temperate in their habits as any of the bands in this superintendency.

I have, &c.,

W. B. MACLEAN,
Indian Superintendent.

PROVINCE OF ONTARIO,
SIX NATION INDIANS,
BRANTFORD, July 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Six Nations of the Grand river for the year ended June 30, 1901.

Reserve.—The reserve is located partly in the township of Tuscarora and partly in the township of Onondaga in the county of Brant, with a portion in the township of Oneida in the county of Haldimand. It contains forty-three thousand six hundred and ninety acres.

Tribe.—The tribes consist of the Mohawks, Oneidas, Onondagas, Tuscaroras, Cayugas, Senecas and Delawares, comprising the Six Nations of the Grand river. The number of tribes composing the Six Nations confederation was not always the same ; prior to 1714 it was the Five Nations, when the Tuscaroras were admitted, since which time it has been called the Six Nations. Some one hundred and fifty Delawares were adopted later.

Population.—There are one thousand one hundred and sixty men, one thousand and seventy-nine women, eight hundred and seventy-five boys, and eight hundred and ninety-six girls, making a total of four thousand and ten, being an increase of twenty-two over the previous year.

Health and Sanitary Precautions.—During the first half of the year there were several cases of typhoid fever. Beyond these there was nothing of an epidemic character on the reserve, while during the latter half of the year there were several cases of chicken-pox and scarlet fever, also some thirty-three cases of small-pox, nearly all of a mild type. These were attended by Dr. E. R. Secord, who was quarantined within a cordon of three by three and three-quarter miles, which was carefully guarded.

By these precautions the disease was confined to this district. Over two thousand Indians were vaccinated. At the present time the disease is confined to one family, and there is every reason to believe it is about stamped out on the reserve.

There were several surgical operations performed on members of the band, under the drection of Dr. Secord, senior physician, among which was one of polypus of the nose of a severe type, all of which were perfectly successful, followed by the best possible results.

There were nine thousand one hundred and sixty-three patients treated at the medical office on the reserve ; one thousand six hundred and ninety-eight visits made, making six thousand three hundred and sixty-eight miles travelled by the physicians during the year.

The annual circular issued by the department was carefully explained to the members of the band, and in many cases it was observed, such as destruction by fire of refuse matter and filth by which disease may be engendered, the prevention of accumulation of any matter which would cause pollution in the vicinity of the wells, springs, or running water, or any such matter being thrown into the same. The sinking of wells is encouraged by the council granting loans for the same. The water is boiled, particularly all surface water when it is necessary to use such for the want of proper wells. Several swamps were drained this year by the use of tile.

The council-house, where large gatherings are held, is regularly and thoroughly cleaned after each meeting and carbolic acid is freely used.

All houses in which small-pox appeared were thoroughly fumigated and white-washed. All clothing used by patients was burned and new clothing supplied.

The Six Nations Board of Health held meetings regularly, and greatly assisted in enforcing instructions issued to prevent the spread of the small-pox, and had notices printed and distributed warning people of their liability for throwing into any creek, stream, pond or pool of water any matter which may cause the same to become polluted or contaminated and which may endanger the public health of the residents of the reserve, which had good results.

Resources and Occupations.—General farming is the chief means of making a living ; a few depend upon gardening and fruit-growing as well as berries, while many of the younger members who will not farm, seek employment in factories in Brantford and other places.

During the berry-picking season several hundred leave the reserve and return after flax-pulling.

Buildings and Stock.—The Indians are taking more interest in improving their barns for the better protection of their stock and crops during the winter and stormy weather. During the past year nine large barns were built.

The crops during the year were very heavy, especially wheat, oats, corn and potatoes.

Education.—The ten schools on the reserve were well attended except during the small-pox outbreak, when three schools were closed, all under the management of a school board.

As the attendance at some of the schools has greatly increased, the board has decided to enlarge two of the schools. There are five white and five Indian teachers employed, all doing satisfactory work.

Religion.—The Indians continue to take great interest in church and Sunday-school work. Large sums of money are raised by the Indians in support of their respective churches. New churches were erected by the Seventh Day Adventists and the Methodists. Services are regularly held by the Church of England in seven localities, Baptists in three, Methodists in four and the Seventh Day Adventists in two. All services are well attended.

Characteristics and Progress.—The Indians are gradually improving their farms by additional improvements in buildings, fences and draining.

The Farmers' Institute of the south riding of Brant held an afternoon and evening public meeting on the reserve on January 10. Both meetings were largely attended and were acknowledged to be the largest meetings held in the county.

Several papers were read by members of the various institutes of the province and discussed, many Indians taking part in the discussions. The annual ploughing match was held, when only Indians competed. It was largely attended.

The agricultural society of the reserve, wholly under the management of the Indians, held its three days' annual fair in October. Only Indians can compete.

The exhibits were equal in number and character to those of any township fair. The attendance was very large, particularly the last two days, when many whites from a distance were present.

The road-work, under the direction of forty-seven path-masters, who are appointed by the chiefs in council annually, was well attended to and the roads kept in good condition ; they compare favourably with the adjoining townships.

Several bridges were constructed on the reserve by Indian contractors under the supervision of the inspector of works.

Three companies of the 37th Regiment of the Haldimand Rifles are composed of Indians and attended the June camp at Niagara, together with a brass band from the reserve.

Temperance and Morality.—The Indians generally are moral and temperate in their habits. There are several temperance societies on the reserve doing good work. Intemperance is certainly greatly on the decrease among the Six Nation Indians.

I have, &c.,

E. D. CAMERON,
Indian Superintendent.

PROVINCE OF ONTARIO,
THESSALON AGENCY,
THESSALON, August 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report concerning the condition and progress of the several bands of Indians in my agency during the year ended June 30, 1901.

THESSALON RIVER BAND.

Reserve.—This reserve is situate on the north shore of Lake Huron about six miles east of the town of Thessalon, and contains an area of two thousand three hundred and seven acres.

Tribe.—These Indians belong to the Ojibbewa tribe.

Population.—The population of this band is one hundred and forty-five, consisting of thirty-four men, forty-seven women and sixty-four children.

Health and Sanitary Condition.—The health of these Indians during the fiscal year has been fairly good, and their sanitary condition above the average. A couple of families not living on the reserve, but in the town of Thessalon, were afflicted by small-pox, but all recovered.

Resources and Occupations.—They are mostly farmers, fishermen and labourers. Many of them work in the lumber camps during the winter, and assist in loading vessels with lumber and pulp-wood in the summer ; and the women make baskets, and gather berries for sale. They are getting along fairly well.

Buildings and Agricultural Implements.—There has been a considerable improvement in their dwellings during the year, which are clean and comfortable. They have very few stables, barns, or agricultural implements (excepting spades, hoes and rakes), as the band do very little farming.

Education.—The school on the reserve has been prospering during the year, in charge of Miss Adele deLamorandiere ; and the attendance has been fairly good.

Religion.—These Indians are all Roman Catholics, and their spiritual welfare is attended to by a visiting missionary. Timber for the erection of a church for them is mostly on the ground, and a contract for the building is about to be let.

Characteristics.—They are a moral, and decidedly law-abiding people, and they compare favourably with the majority of the white population of the district.

General Remarks.—They are taking greater interest in education, and have made some progress since my last report.

Mississagi River Band.

Reserve.—This reserve is situated on the east side of the Mississagi river, and on the north shore of Lake Huron. Since my last report three thousand four hundred and eighty-four acres have been surrendered, and the reserve now comprises an area of five thousand six hundred and thirty-six acres.

Tribe.—The Indians of this band are of the Ojibbewa tribe.

Population.—The population is one hundred and sixty-two, consisting of thirty-three men, forty-five women and eighty-four children.

Health.—The health of these Indians cannot be reported as satisfactory. They have still the dregs of their old enemy, scrofula, and kindred diseases amongst them. During the year, however, there has been improvement, under the skilful aid of their physician, Dr. Baxter, and they have escaped diseases of an epidemic character.

Resources and Occupations.—These are hunting, fishing, farming, and a few of the Indians are labourers. Some of the members are called 'inlanders' and live by hunting and fishing in inland waters. Those who live on the reserve cultivate small gardens, catch fish for their own use, and work in the lumber camps in the winter, and in the saw-mills near the reserve and loading lumber in the summer months ; and the women and children gather berries and make baskets for sale.

Buildings.—Their buildings are mostly of log, in a fair state of repair and comfort. These Indians give little attention to farming, and have little live stock or farming implements.

Education.—They have a good school on the reserve, which is fairly well attended, and is ably conducted by Miss Lucy Heiss.

Religion.—They are all Roman Catholics, save one very old man, who claims to adhere to the religion of his forefathers. They have no church, but hold their religious services in the school-house.

Characteristics.—The younger men are industrious, and this has a beneficial effect on the band, so that there is an improvement in this respect since my last report.

Morality.—They are not so high in the scale in this regard as could be desired, and it is difficult to see how there can be much improvement so long as they tolerate the class of white people with which they associate.

SERPENT RIVER BAND.

Reserve.—This reserve lies east of the mouth of the Serpent river, is bounded on the south and east by Lake Huron and on the north by the Serpent river, and contains twenty-seven thousand four hundred and eighty acres.

Tribe.—These Indians are of the Ojibbewa tribe.

Population.—The population of this band is one hundred and thirteen, comprising twenty-six men, thirty women and fifty-seven children.

Health and Sanitary Condition.—The health of these Indians has been good during the year and the sanitary condition of their dwellings satisfactory.

Resources and Occupations.—These Indians work mostly in the saw-mills on the reserve, and in the lumber camps in the winter, and earn good wages. They do very little in the way of agriculture. The women and children, in the berry season, pick large quantities of berries for sale.

Buildings.—Their houses are nearly equal in the number of frame and log buildings. Their furniture is of a better class than is usually found on an Indian reserve ; and they are clean and neat, indicating prosperity.

Education.—They have an excellent school ; the attendance is exceptionally good, and the parents are taking a more lively interest in education since my last report.

Religion.—The members of the band are Roman Catholics. They have a good church, and appear to take a lively interest in their religious instruction.

Characteristics.—This band is religiously inclined, law-abiding, intelligent, industrious and progressive.

Temperance and Morality.—These Indians are very temperate and moral in their habits and conduct.

SPANISH RIVER BAND.

Reserve.—This reserve is situated on the north shore of Lake Huron, along the bank of the Spanish river. It is bounded on the south and west by the waters of Lake Huron and on the north by the Spanish river, and contains twenty-eight thousand acres. This band, as to residence, is divided into three communities. Two of these dwelling on the reserve are in my charge, viz., at Sagamook, a beautiful point running out into the north channel, and on the left bank of the Spanish river in the easterly end of the reserve. The third community is on Manitoulin island, under the jurisdiction of Indian Agent Sims.

Tribe.—These Indians are of the Ojibbewa tribe.

Population.—The number of souls in the two communities within the jurisdiction of my agency is three hundred and twenty-two, consisting of sixty-six men, seventy-nine women and one hundred and seventy-seven children.

Health.—The health of these Indians has been exceptionally good.

Resources and Occupations.—These are farming, labouring, fishing and hunting, berry-picking (in the season), and basket-making. Practically the only crops these Indians raise consist of oats, corn, pease and potatoes.

Buildings and Stock.—These people have always taken the lead in the agency for good buildings, and during the year they added several nice dwellings and a few small barns. There has also been made a substantial addition to the number of their milch cows and young stock.

Education.—They have two good schools, one at Sagamook, fairly well attended and in charge of Peter Taylor, and the other at Spanish river, ably conducted by Miss Morley.

Religion.—Those residing at Sagamook are nearly all Roman Catholics, and those residing at Spanish river are mostly Episcopalians.

Characteristics and Progress.—They are a law-abiding, quiet and industrious people and have made considerable progress during the year.

Temperance and Morals.—They are a temperate, and, so far as I am able to learn, a moral people.

General Remarks.—It is matter for congratulation that, while in the lumber camps and villages and towns throughout the Algoma district there has been a very serious outbreak of the small-pox epidemic, yet by strictness and care we have succeeded in keeping the loathsome disease entirely out of the reserves of this agency.

I have, &c.,

SAMUEL HAGAN,
Indian Agent.

PROVINCE OF ONTARIO,
WALPOLE ISLAND AGENCY,
WALLACEBURG, September 3, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report on the Chippewas and Pottawattamies of Walpole island for the year ended June 30, 1901. Together with a statistical statement for the same period, giving the census returns of both bands taken in the month of August last, showing the increase and decrease in the population, progress in agriculture and other industries whereby the Indians make their living.

Health and Sanitary Precautions.—The people have been generally healthy during the year, no epidemics having appeared among them.

Population.—Both bands have increased a little in number since the last census was taken, the Chippewas now having a total of six hundred and twenty-five against six hundred and sixteen last census ; while the Pottawattamies have a total of one hundred and seventy-nine against one hundred and seventy-four in 1900.

Education.—The three schools are being well and regularly kept through the year and there is an education within reach of every child on the reserve.

A good many of the more advanced boys and girls belonging to the reserve are attending the industrial school at Muncey (Mount Elgin Institute) and the Shingwauk Home, and are reported as making good progress.

All of the teachers of the schools on the Walpole island reserve are to the manor born, and were educated at these institutions.

There are three schools on the reserve, which together with the fact that the children have access to the industrial schools, gives all an opportunity of getting an education, and most of the parents are taking advantage of their opportunities by sending their children to their own schools at home, or where at all possible sending them to the industrial schools.

Religion.—Divine service is held in both churches (Anglican and Methodist) every Sunday morning and evening, and the missionaries are attending well to their duties.

Health and Sanitary Precautions.—The people are giving more attention to cleanliness in and around their premises, and are using lime for whitewashing and disinfecting much more than heretofore, the lime being furnished to all who ask for it free of cost, except to go and get it, and they are getting to use it quite freely.

Sugar Beets.—The experiment of raising sugar beets which was reported last year in my annual report, has proved a success ; a good crop was raised last year, and with satisfactory results as regards profits, it being found that sugar beets will grow and mature for certain, and that there is a large profit in a crop of sugar beets over and above the cost of production. And many of the Indians who were induced to plant last year did not require any inducement this year, but planted because they made money last year. This whole section, mainland and islands, seems peculiarly well adapted for raising sugar beets, and after this year there will be a market for all that can be produced, as a company has been formed and stock ($600,000) all taken up for the erection of a building and manufacture of sugar from the sugar beet at Wallaceburg where the Indians will be able to sell all they can raise, as well as get employment on a large scale as they were this year on a small one, at $1.50 per day in the cultivation (weeding, &c.) of the sugar beet.

Crops.—My report last year covered so much ground and treated of so many subjects that it is rather hard to find anything new to report, and I have now left only a report on the crops of the present year, which have all been harvested in good order, and have been threshed for the most part, giving quite a satisfactory return, much better than was expected in the spring and forepart of the summer. The wheat has turned out fairly well. Oats, a good crop. Corn, a heavy crop (not yet harvested). Potatoes, on account of drought, will be a short crop. Hay is very heavy. Vegetables fairly good ; fruit very light ; apples almost a failure.

Disease Among Pigs.—There has been a slight recurrence of disease among the pigs on the reserve, and some deaths. It has not been called cholera, and the inspectors have had some doubts as to its being cholera ; they are much inclined to the belief that it is the water the pigs have to drink in the very dry weather that is the cause of the disease, and if water that is in the creeks where the pigs and cattle away from the rivers have to drink will ever kill, it surely will kill here, and the veterinary surgeons have said so.

I have, &c.,

ALEX. McKELVEY,
Indian Agent.

PROVINCE OF QUEBEC,
ABENAKIS OF BECANCOUR,
BECANCOUR, August 12, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement for the year ended June 30, 1901.

Reserve.—The reserve of the Abenakis of Becancour is situated on the western bank of the Becancour river, in the parish of the same name, county of Nicolet. It contains an area of one hundred and seventy-six acres.

Tribe.—The Indians of this band are Abenakis.

Vital Statistics.—The population of this band is fifty-one, composed of thirteen men, twenty-three women and fifteen children. During the year there were no births and no deaths.

Resources and Occupations.—The chief occupations of these Indians are lumbering and taking timber down the river. They also make baskets and other fancy

articles. Agriculture is only a secondary occupation with them and they are not well provided with agricultural implements.

Buildings.—As a rule their buildings are mediocre.

Stock.—These Indians own a small number of horses and cattle, also some pigs and some fowls.

Education.—The school on the reserve was not open this year owing to the small number of children of school age, and their indifference. However, the children have the privilege of attending the school for white children in the neighbourhood of the reserve at a distance of five or six acres, but they do not avail themselves of it.

Religion.—All the Indians of this band are Roman Catholics, but many of them are not very attentive to their religious duties. Having no church on the reserve, they attend the parish church and are ministered to by the curé, who acts as missionary.

Characteristics.—These Indians are fairly industrious, but there is little improvement in their habits, and they are poor, which is due in a great measure to their improvidence.

Temperance and Morality.—Temperance has certainly not made progress during the year.

The morality of these Indians is good.

I have, &c.,

H. DESILETS,
Indian Agent.

PROVINCE OF QUEBEC,
ABENAKIS OF ST. FRANCIS,
ST FRANCOIS DU LAC, July 6, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and statistical statement for the year ended June 30, 1901.

Reserve.—The reserve of the Abenakis of St. François de Sales is composed of several pieces of land situated in the seigniories of St. Francois du Lac and Pierreville, forming a total area of one thousand eight hundred and nineteen acres and fifty-two perches.

The portion of the reserve inhabited by the Abenakis bears the number 1,217 on the official cadastre of the parish of St. Thomas de Pierreville, and comprises an area of two hundred and twenty-eight acres. The village is situated on the east side of the River St. Francis about six miles from its discharge into Lake St. Peter. It is in a most picturesque place and presents a very pretty view.

Tribe.—The Indians of this band call themselves the 'Abenakis of St. François de Sales.'

Vital Statistics.—The band under my charge is composed of three hundred and forty-one persons. Of this number eighty-four are men and eighty-five women over twenty-one years of age, and eighty-four are boys and eighty-eight girls under that age. During the year there were six births and sixteen deaths.

Health and Sanitary Precautions.—There have not been any contagious diseases or epidemics during the year, and the Indians of the band as a rule enjoy good health.

The village is situated in a most healthful place, the dwellings are kept clean and in accordance with the laws of hygiene.

Resources and Occupations.—The chief occupation of the Abenakis is the making of baskets and fancy work. They make baskets all winter, and about the month of June most of the families disperse to the various watering-places in the United States, especially to the Atlantic coast and the White mountains, as well as in the province of Ontario, in order to sell their merchandise. In the fall they return. This is their chief source of income.

There are also some families that hunt while the basket-making is going on ; but those who make a living in this manner are growing less each year, because game is becoming more rare, and the hunters are obliged to go a long distance to reach it.

Agriculture is only a secondary occupation amongst the Abenakis of St. Francis. Some of the Indians do not cultivate at all, others raise a few vegetables such as potatoes, Indian corn, &c., some families cultivate a little more, but the sale of their baskets, which compels them to be away a great part of the summer, prevents their giving to farming the attention required for success.

Buildings, Stock and Farming Implements.—As a rule the buildings are fairly good and there are in the village several very pretty and comfortable houses.

The Abenakis own several horses, many fine cows and some pigs.

There are only a few agricultural implements and they are of only small value.

Education.—The education of the children of the band is carefully attended to ; most of the Indians can read and write and many members of the band have taken a course in a college or other higher educational institution.

There are two schools on the reserve ; one, Roman Catholic, in charge of the Rev. Sister Marie Josephine ; and the other, Protestant, under the direction of the Rev. H. O. Loiselle. These schools are well conducted and afford an excellent education to a large number of children.

Religion.—The Abenakis belong to various religious denominations, as follows : two hundred and fifty-seven are Roman Catholics, fifty are Anglicans, one is a Baptist, and thirty-three are Adventists. There are on the reserve three churches, one, an Adventist, under the charge of Rev. Pierre Emmett, another, Anglican, under the Rev. H. O. Loiselle, and the third, Roman Catholic, under the Rev. Jos. de Gonzaque. The Roman Catholic church, which dates almost a century back, was unfortunately destroyed by fire during the month of July last ; it is to-day partly raised from its ruins and again open for worship, thanks to the efforts of the Rev. Jos. de Gonzaque, the zealous missionary, of Chief Joseph Laurent and to a large number of charitable persons, but it is not yet finished and there remains much to be done.

Characteristics and Progress.—The Abenakis as a rule are hard-working and industrious. The making and sale of baskets enables them to obtain a fairly comfortable living, and some of them are rich.

Each family on coming back in the fall has a nice little sum of money ; and if they were more economical and less improvident, they might save some money for hard times.

However, a good many build nice comfortable houses for themselves, and the village presents a very attractive appearance.

Temperance and Morality.—There has not been much trouble owing to the use of intoxicants, and as a rule the morality of the Abenakis is good.

General Remarks.—The Abenakis of St. Francis are as civilized as the surrounding white people, with whom they live in perfect harmony.

In this band there are few, if in fact there are any, of pure Indian blood; they have all more or less white blood in their veins, and a good many of them have lost the characteristics of the red man, and for those who do not know them it is very difficult to recognize them as Indians.

They nearly all speak English and French, and they use one or other of these languages in their intercourse with white men ; but in their family circle, in their meetings and their council, they speak the Abenakis language, which they keep up with religious care.

I have, &c.,

A. O. COMIRE,
Indian Agent.

PROVINCE OF QUEBEC,
ALGONQUINS OF RIVER DESERT,
MANIWAKI, July 5, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement, for the year ended June 30, 1901.

Reserve.—The Maniwaki reserve is situated on the Gatineau river, in the county of Wright, province of Quebec, about ninety miles from the city of Ottawa. It comprises the township of Maniwaki, embracing about forty-five thousand seven hundred and fifty acres.

Tribe.—The Indians of this reserve belong to the Algonquin tribe, with a small mixture of Nipissings.

Vital Statistics.—The present population is three hundred and ninety-six, consisting of ninety-seven men, one hundred and seven women and one hundred and ninety-two children.

There were nine births and six deaths during the year, making an increase of three over last report. The causes of death were as follows : one of old age, one by drowning, one of pneumonia, one of consumption, and two of infantile diseases.

Health and Sanitary Precautions.—The health of the Indians for the past year has been good, and no contagious disease has visited the reserve other than consumption, with which there are a considerable number of families afflicted. All the necessary precautions have been taken in respect to cleaning premises and whitewashing, an ample supply of lime being furnished the Indians each year by the department. The vaccination of all adults and children has been strictly attended to.

Resources and Occupations.—The land is fertile and well adapted for agriculture. The timber limits of the Gilmour & Hughson and W. C. Edwards Companies occupy three-fourths of the reserve. There is about six thousand acres located to Indians and about thirty-eight thousand acres available for settlement. The village of Maniwaki with the surrounding lumber industries makes a good market for every description of farm produce and gives remunerative employment to all the Indians who wish to work. The high wages during the past winter and spring have left the Indians in a good condition to buy seed and put in a larger crop than usual.

Buildings.—There has been considerable progress in outbuildings during the year, but no dwelling-houses have been erected and one dwelling-house has been destroyed by fire.

Stock.—There has been very little increase in stock, owing to the increased value of cattle and horses.

Farming Implements.—There has been one two-horse sawing-machine purchased by Benjamin Chellifoux, and one very fine double express purchased by Chief John Tenesco, and a number of other implements.

Education.—There are two school-houses on the reserve, one of which is closed, as it is found not to be suitably situated for the children. The new school is very well attended, as there is a truant officer appointed to see that the children attend regularly. Some of the parents are very careless as to the education of their children. Two families who resided in close proximity to the school, left for the woods last fall, taking their children with them, and only one family has yet returned. These two families resided permanently on the reserve before the erection of the new school.

Religion.—The Indians on this reserve are all Roman Catholics and attend the Oblate mission at Maniwaki. The Oblate Fathers propose to build a new church for the Indians, as they found it very inconvenient to have to preach in three languages; they agreed to build a church worth $3,000 at their own expense. The Indians would not consent to this, as they claim the present church is theirs, although it cost the white population about $27,000.

Characteristics and Progress.—There has been good progress made in clearing and cultivating during the past spring, two Indians, Chief John Tenesco and Councillor Chellifoux, cropped over sixteen acres of new land. Gabriel Cayenne has purchased a team of horses and started into farming in earnest. There has been considerable progress made by all those who are engaged in farming during the course of the past year.

Temperance and Morality.—In the matter of temperance I have very little change to report : owing to the prosperity prevailing amongst the Indians at present it is very hard to keep them from obtaining liquor.

The morality of the Indians resident on the reserve is good, especially that of the younger class, who are at present receiving a good religious training.

I have, &e.,

W. J. McCAFFREY,
Indian Agent.

PROVINCE OF QUEBEC,
TEMISCAMING AGENCY,
NORTH TEMISCAMING, August 21, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my annual report and statistical statement in connection with the Algonquins of the Temiscaming reserve.

Reserve.—The Temiscaming reserve is situated on the north bank of the River Quinze, at the head of Lake Temiscaming, county of Pontiac. It contains an area of thirty-eight thousand four hundred acres, of which twenty-three thousand and seventy-five have been surrendered, leaving fifteen thousand three hundred and twenty-five for the use of the band.

Vital Statistics.—The number in this band is two hundred and two, consisting of forty-three men, fifty women, fifty-six boys and fifty-three girls. There were nine births and eleven deaths during the year.

Health.—There was a good deal of sickness amongst the Indians during the fall and winter. Measles broke out amongst the young people early in the fall, and in the winter a great many were attacked by grippe.

Resources and Occupations.—The Indians engage in the following occupations : agriculture, hunting, fishing, building row-boats, skiffs, bark canoes, snow-shoes, acting

as guides for tourists and sportsmen in summer, working in the lumber camps during winter and on the drives in spring.

Buildings, Stock and Farming Implements.—There have been two houses put up during the year, but they are not yet completed.

The live stock is about the same as last year.

The band is supplied with all the machinery and farming implements that are really necessary at the present time.

Education.—There is one school on the reserve. Mr. J. J. MacCarragher is in charge, and under his tuition the children are making very satisfactory progress.

Religion.—The Indians of this agency are all Roman Catholics, and are under the spiritual care of the Rev. Father Beaudry. They attend church very regularly. The church is one of the sights on the reserve.

Temperance and Morality.—With the exception of a few, the Indians are law-abiding and temperate.

I have, &c.,

ADAM BURWASH,
Indian Agent.

PROVINCE OF QUEBEC,
AMALECITES OF VIGER,
CACOUNA, July 8, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report accompanied by statistical statement for the Viger reserve, for the year ended June 30, 1901.

Reserve.—The present reserve of the Amalecites of Viger is situated on the bank of the River St. Lawrence, near the village of Cacouna. Most of the Indians are scattered in various counties. Those who stay at home suffer a good deal from cold and hunger. Sometimes the government gives them a little assistance in provisions, and they are very grateful for it, and this is a great act of charity on the part of the government. Most of the people are widows and they are greatly in need, the rest of the band are all scattered.

Vital Statistics.—The population of the band as entered on the list is one hundred and three including absentees. During the year there were two deaths—that of a young woman and of a man—and there were two births.

Health.—There was no epidemic on the reserve this year. There is an old man who is paralyzed, and a young woman who has been sick a long time.

Resources and Occupations.—The principal resources of these Indians during the summer is the making of baskets of all kinds and many other fancy articles, which they sell to strangers who come to spend the summer at Cacouna. Often the men act as guides to sportsmen who make little trips on the water, and sometimes for fishing. They also make snow-shoes and moccasins.

Education.—The children attend the village school very well.

Religion.—All the Indians of the band are Roman Catholics, so far as I can see.

Temperance and Morality.—With some exceptions, temperance is well observed, and the morality is good.

General Remarks.—The Indians of this band are not making progress, especially in agriculture, and most of them are in great poverty.

I have, &c.,

EDOUARD BEAULIEU,
Indian Agent.

PROVINCE OF QUEBEC,
HURONS OF LORETTE,
JEUNE LORETTE, August 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report and tabular statement in regard to the Huron tribe and other Indians in my agency for the year ended June 30, 1901.

Reserves.—The Huron tribe still owns three reserves (1) that of the village of Lorette, containing thirty acres (2) the Quarante Arpents reserve, having an area of one thousand three hundred and twenty-two acres, and (3) the Rocmont reserve, in the county of Portneuf, containing an area of fifteen square miles, equal to nine thousand six hundred acres. These three reserves make a total area of ten thousand nine hundred and ninety acres. Mr. Atkinson has renewed, as in previous years, his right to cut pine and spruce on the Rocmont reserve in accordance with special arrangement with the department.

Population.—Since my last report the population has increased by five, which brings the number up to four hundred and fifty-four.

There has been no change in the population of the Amalecite Indians of St. Pierre de Charlesbourg, county of Quebec. These thirty-one Indians live from hand to mouth, doing a little trade in Indian fancy wares at which they have been making a little for some years.

The same thing may be said of the Abenakis of this county, who make a better living than the Amalecites and engage more in the cultivation of the soil. The death of old father Philippe of the Abenakis group of St. Urbain during the course of the year, has reduced the population to fifteen, who make a poor living and are sometimes in distress, when the department relieves them from time to time.

The total population in my agency is five hundred and twelve.

Occupations.—The industry in moccasins has ceased altogether this year. That of snow-shoes in its turn has been a little better than usual. Owing to this lack of work, most of the Indians have engaged in considerable work found in the neighbourhood of Quebec and have thus escaped the distress that threatened them last year. This work, promising to last for some years, assures many families of their means of existence.

The cultivation of the soil has also been neglected, if not more so than in past years. So long as the Indians do not take more interest in the land that they are able to cultivate, agriculture will be a dead letter to them, and they will make no progress.

Indian fancy wares are only slowly gaining the position that they held formerly. The veritable American glut of these articles is the cause, and while it lasts, the revenue from them will be very small.

Hunting and fishing are much more to the taste and aptitude of the Huron than the profit they bring in. The restrictions of the local government of Quebec still keep this means of making a living in suspense, and do not promise to relax very soon.

Health and Sanitary Precautions.—The sanitary condition is very good and the general cleanliness of the village assures stability in this regard.

Education.—It affords me pleasure to be able to report surprising progress in this matter of vital interest to the tribe. Since the good sisters have taken charge of the school, a veritable emulation has been manifest amongst the pupils, who are becoming more regular and assiduous in their studies. I can say without exaggeration that

these nuns truly deserve the name of model teachers, and only hardened ignorant people could complain of them. They make a good use of the garden surrounding the school on one side, and give a good example of domestic care which will be followed by many families.

Religion.—Abbé Guillaume Giroux, whom a serious illness was threatening to remove from the tribe, is well enough now to direct the spiritual welfare of the tribe, a duty which he always acquits with both zeal and devotion.

Morality and Temperance.—The tribe in the matter of morality is quite equal to the people of the surrounding parishes. If there are some abuses, and it must be so, they do not last long, and are not followed by troublesome consequences.

François Groslouis Sassenio succeeded as grand chief the lamented Philippe Vincent. The unanimous choice of the tribe, the new grand chief possesses all the qualities required by one holding this position in the tribe, a position of importance.

I have, &c.,

ANTOINE O. BASTIEN,
Indian Agent.

PROVINCE OF QUEBEC,
IROQUOIS OF CAUGHNAWAGA,
CAUGHNAWAGA, August 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report for the year ended June 30 last, for the Caughnawaga agency, also statistical statement in regard to the affairs of the band.

Reserve.—The reserve contains an area of twelve thousand three hundred and twenty-seven acres, about four thousand of which is in timber, about four hundred is in common, and the remainder is under cultivation or pasturage.

As a rule the soil is of good quality and there are some quarries, the stone of which is much thought of by contractors.

Vital Statistics.—The population is one thousand nine hundred and ninety-two, consisting of five hundred and forty-three men, five hundred and eight women, and nine hundred and forty-one young people under the age of twenty-one years. There were during the year eighty-six births and eighty-six deaths. There was a decrease of thirteen in the population owing to three families leaving the reserve.

Health.—There was no epidemic on the reserve during the year, although there was one case of small-pox, which was quarantined at once to prevent the spread of the disease.

Resources and Occupations.—Farming, bead-work and making lacrosses are the principal resources of the Indians, also the quarries and the taking of rafts down the Lachine rapids.

They engage in farming, take rafts down the rapids, and many of them are employed by the Iron Bridge Company of Lachine, also by the Hydraulic Company, which gives them quite an income. There has been very little work in the quarries during the year.

The general industry is bead-work by the women and the making of lacrosses and snow-shoes by the men.

Buildings and Agricultural Implements.—The Indians of the village have fairly comfortable houses, and the farmers have also some good buildings, and they provide themselves with farming implements for the cultivation of their lands.

Education.—Four hundred and three children are of school age. Of this number one hundred and eighty attend the school, and very irregularly. However, more progress was made than in the previous year. There are two Roman Catholic schools, the boys' school, under the direction of a master, and the girls' school, under the charge of a mistress ; and the Methodist school for both boys and girls, under the charge of a mistress.

Religion.—There is a Roman Catholic church and two missionaries to conduct service. The Methodists hold their services in their school-house. They have a resident missionary on the reserve.

Characteristics and Progress.—The Indians are industrious and skilful. There has been much progress in their taste for work and their manner of living.

Temperance.—There has not been more drunkenness than usual during the year ; nevertheless, I have not observed any improvement.

General Remarks.—The affairs of the band in general have been satisfactory, and I have observed that life has been much easier during the year for most of the Indians.

I have, &c.,

A. BROSSEAU,
Indian Agent.

PROVINCE OF QUEBEC,
IROQUOIS OF ST. REGIS,
ST. REGIS, August 13, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my report and statistical statement for the year ended June 30, 1901.

Reserve.—This reserve is situated on the banks of the St. Lawrence river, in the province of Quebec, opposite the town of Cornwall, Ontario, including islands a little below Prescott, Ontario, thence down stream opposite the village of Lancaster, Ontario. It contains an area of about seven thousand one hundred and twelve acres.

Vital Statistics.—The population consists of three hundred and four men, two hundred and ninety-nine women, and seven hundred and sixty-four young people under twenty-one years of age, making a total of thirteen hundred and sixty-seven. During the year there were forty-seven births and thirty-one deaths, making an increase of sixteen.

Sanitary Condition.—There was no epidemic on the reserve during the year, and the sanitary condition of the band has been good.

Resources and Occupations.—The principal occupations of these Indians are farming, hunting, fishing, trapping, acting as guides for tourists, running rafts of timber, doing day labour with farmers and on railways, also manufacturing lacrosse-sticks and baskets to a large extent.

Education.—There are two schools on the reserve in operation. The teachers are W. J. Bishop, from Crysler, Ontario, and Miss Katherine Hughes, from Ottawa. There is a lack of interest in the parents in not sending their children to school. Their progress leaves much to be desired.

Religion.—There are two churches on the reserve—one Roman Catholic and one Methodist. About one hundred and thirty-nine of the Indians are Methodists, and



ABENAKIS INDIANS (ST. FRANCIS, QUE.) WORKING AT THEIR CEMETERY WITH THEIR MISSIONARY.

twelve hundred and twenty-eight are Roman Catholics. There are two missionaries, one for each of the denominations named.

Characteristics and Progress.—The Indians are making fair progress in farming, cleaning up their land, and in erecting new buildings.

Agricultural Implements.—The Indians are well supplied with implements almost equal to the white man.

Temperance.—Temperance has not progressed during the year.

I have, &c.,
GEORGE LONG,
Indian Agent.

PROVINCE OF QUEBEC,
LAKE OF TWO MOUNTAINS,
OKA, July 9, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my report with statistical statement, for the year ended June 30, 1901.

Reserve.—The reserve of this band is situated on the Lake of Two Mountains, on the Ottawa river, province of Quebec.

Vital Statistics.—The population is four hundred and forty-two, composed of one hundred and forty-three men, one hundred and eleven women, one hundred and ten boys and eighty-eight girls. During the year there were sixteen births and ten deaths, making an increase of six.

Health and Sanitary Precautions.—The health of the Indians has been, on the whole, fairly good ; there has not been any epidemic or serious illness. The Indians are beginning to understand more and more the necessity of keeping their houses in a state of cleanliness.

Education.—There are two schools on the reserve. The teachers are Miss E. Sly and Miss E. N. Williams. They are very competent and discharge their duties well. The schools are provided with all necessary equipment. The attendance of the pupils is not large owing to the indifference of the Indians in the matter of education.

Religion.—The Methodists hold service in the school-house. The Roman Catholics worship in the parish church.

Characteristics.—Some of the Indians are making remarkable progress in agriculture. I might mention among others of the Algonquin Indians, Bazil Murray, Charles Murray, Hyacinthe Vincent, Olivier Vincent, Jacques Murray and Francis Minjaki ; among the Iroquois, Peter Oak, Simon Simon, Amable Roussin, Joseph Gabriel, Angus Gabriel, Jos. K. Gabriel and Jacques Moise. All these Indians follow the ways of the wite man.

Resources and Occupations.—These Indians cultivate land, make barrel-staves, large baskets and bead-work. Several of them make moccasins and mittens ; others work in the shanties.

Buildings and Agricultural Implements.—The buildings of the Indians are, as a rule, fairly comfortable. Several of the Indians need to build, but building timber

is too scarce and they are too poor to procure it. Many of them lack farming implements.

Temperance and Morality.—Temperance has certainly not made progress, but the Indians of this band are fairly moral.

General Remarks.—On the whole the condition of this band is saitsfactory.

Improvements.—There has been some improvement among the Algonquin Indians. This tribe is more inclined to cultivate land than the others.

I have, &c.,

JOSEPH PERILLARD,
Indian Agent.

PROVINCE OF QUEBEC,
MICMACS OF MARIA,
MARIA, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit to you my annual report for the year ended June 30, 1901.

Reserve.—The reserve of my Indians is situated on a very pretty point of land bathed by the Baie des Chaleurs on the south and by the Great Cascapedia on the east. The Micmacs have lived on this point since time immemorial. The soil of this reserve is sandy and clayey and very fertile. If the Indians were to cultivate intelligently and with care, they might obtain from it a large portion of their subsistence. The area of this reserve is four hundred and sixteen acres.

Population.—There has been an increase of thirteen souls in the population during the past year, caused by births and immigration.

Sanitary Condition.—The health of the Indians has not been better than it was last year. Grippe and measles were rather severe during a large part of the winter and spring.

Education.—Very few of the old Indians can read and write ; but the young people who have attended school regularly read, write and understand figures. They are also much more intelligent than the old generation.

Religion.—All the Indians are Roman Catholics. Converted by the first missionaries to the country, they have always remained attached to the religion of their fathers.

Temperance.—There are a few cases of intemperance amongst the Indians to-day. The supervision of the constable, their poverty and the distance from hotels, keep them sober in spite of themselves, for nearly all of them like liquor.

Occupations.—These Indians do a little farming, hunting and fishing. They work in the shanties, attend to the drive of the logs, and act as guides to sportsmen on the river ; they also work among the farmers. In winter they make moccasins, snow-shoes, baskets, axe-handles, churns, and many other things, which they sell to white people. In short if they were more provident and economical, they might live without any discomfort.

I have, &c.,

J. GAGNE, Priest,
Indian Agent.

PROVINCE OF QUEBEC,
MICMACS OF RESTIGOUCHE,
ST. ALEXIS DE METAPEDIA, August 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Reserve.—This reserve is situated on the north side of the River Restigouche, in the county of Bonaventure, province of Quebec. It has an area of about eight thousand eight hundred and fifty acres, of which about six hundred acres are cultivated.

Population.—The number of Indians on this reserve is four hundred and seventy-four. There is a decrease of six since last year due to migration.

Health and Sanitary Precautions.—The health of the Indians is good in general ; there is no infectious disease among them. Sanitary precautions are well carried out.

Religion.—The Rev. Capuchin fathers, who are established among them, take great care of their spiritual welfare. The Indians are all Roman Catholics. They are very attentive to their religion. They sing hymns and psalms in their own language at divine service.

Education.—Miss Mary Isaac, the teacher, is an Indian girl of this reserve, who has a first-class diploma in French and English. She has still charge of the school and is giving good satisfaction. She teaches English, French and Micmac.

Occupations.—Many of the Indians are employed as guides to the tourists. They also work loading vessels, at which they get good wages, being good workers. In winter they are employed at lumbering. I am happy to say that they take more interest in farming than formerly. Some of them raise good crops.

Temperance.—I am sorry to say that some of them are still addicted to strong drink. It is a pity, for otherwise they are good-natured, industrious and skilful.

I have, &c.,

JEREMIE PITRE,
Indian Agent.

PROVINCE OF QUEBEC,
MONTAGNAIS OF LOWER ST. LAWRENCE,
BERSIMIS, September 2, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit my annual report for the fiscal year ended June 30, 1901, for my agency of Lower St. Lawrence, comprising thirteen hundred and thirteen Montagnais Indians.

ESCOUMAINS BAND.

Reserve.—This reserve is situated on the southwest side of Escoumains river, on the north shore of the St. Lawrence, and comprises an area of ninety-seven acres.

Tribe.—The Indians of this band are all of the Montagnais nation.

Vital Statistics.—The population is forty, consisting of ten men, eleven women and nineteen children.

Health and Sanitary Precautions.—The health of these Indians has been good throughout the year. Their houses and premises are kept clean.

Occupations.—The chief occupation of these Indians in winter is fur-hunting ; in summer, acting as guides to sportsmen.

Education.—There is no school on the reserve. None of the Indians can read or write, except their own language, although nearly all can speak French.

Religion.—All these Indians are Roman Catholics. They have no church on the reserve, but attend the church of the parish of Escoumains.

Progress.—I do not see that the band is making much progress.

Temperance and Morality.—All these Indians are very temperate ; none are addicted to strong drink, and are all very moral in other ways.

Bersimis Band.

Reserve.—This reserve is situated on the Bersimis river, on the north shore of the St. Lawrence, county of Saguenay. The area is sixty-three thousand one hundred acres.

Tribe.—The Indians of this band are all of the Montagnais nation.

Vital Statistics.—The population is this year four hundred and fifteen, consisting of one hundred and thirty-two men, one hundred and thirteen women and one hundred and seventy children. Six families did not come to the coast this spring, which makes the difference in the population this year.

Health and Sanitary Precautions.—The health of this band has not been good since spring ; a good many had the grippe. Their houses and premises are kept clean as far as possible for them.

Occupations.—The only occupation of this band is fur-hunting. Nearly all the Indians come out of the woods at the end of June. They go back to their hunting-grounds at the end of August and the beginning of September. Their hunting was not quite so good this year as it was last year. The prices paid for furs this year were not so high as last year. Some Indians leave their families on the reserve for the winter, and only those who do so, fish to any extent; the rest do a little fishing for their daily use.

Education.—This band has a school on the reserve. The children are learning farly well.

Religion.—All the Indians of this band are Roman Catholics. They have a very good and pretty little church on the reserve, which is always kept in good order.

Progress.—I do not see that the Indians make much progress. They do not care much for anything else than hunting.

Temperance and Morality.—The morality of the band is farly good, but some are addicted to strong drink.

Seven Islands Band.

Reserve.—This band has no reserve.

Tribe.—The Indians of this band are all of the Montagnais nation.

Vital Statistics.—The population is three hundred and seventy-seven, consisting of one hundred and ten men, one hundred women and one hundred and sixty-seven children.

Health and Sanitary Precautions.—The health of these Indians has not been good this spring—a great many had the grippe. Their houses are kept clean.

Occupations.—Fur-hunting is the only occupation of these Indians.

Education.—The Indians of this band have no school. Quite a number can speak French.

Religion.—All the Indians of this band are Roman Catholics. They have a church.

Temperance and Morality.—Many Indians of this band are addicted to strong drink ; their morality in other respects is fairly good.

Mingan Band.

Reserve.—The Indians of this band have no reserve.

Tribe.—These Indians are all of the Montagnais nation.

Vital Statistics.—The population is one hundred and thirty-two souls, consisting of thirty-nine men, forty-four women and forty-nine children.

Health.—The health of this band has not been good since spring ; quite a number had the grippe.

Occupations.—The only occupation of these Indians is hunting.

Education.—The Indians of this band have no school. Only a few speak either French or English.

Religion.—All the Indians of this band are Roman Catholics. They have a church.

Temperance and Morality.—The morality of this band is good, but many use intoxicants whenever they can procure them.

Natashquan Band.

Reserve.—These Indians have no reserve.

Tribe.—All the Indians of this band are of the Montagnais nation.

Vital Statistics.—The population is forty-three, consisting of eleven men, twelve women and twenty children.

Health.—The health of these Indians has been fairly good this year.

Occupations.—The only occupations of this band are fir-hunting in winter, seal-hunting and fishing in summer.

Education.—This band has no school.

Religion.—All these Indians are Roman Catholics. They have no church, but attend divine service at the church of the neighbouring white people.

Temperance and Morality.—The Indians are moral, but like strong drink.

Musquaro Band.

Reserve.—The Indians of this band have no reserve.

Tribe.—All the Indians of this band are of the Montagnais nation.

Vital Statistics.—The population is three hundred and six, consisting of seventy-six men, seventy-eight women and one hundred and fifty-two children.

Health.—The health of these Indians has been fairly good this year.

Occupations.—The occupations of this band are fur-hunting in winter, seal-hunting in summer ; also fishing to a small extent.

Education.—This band of Indians has no school.

Religion.—All these Indians are Roman Catholics, and have a church for their own use.

Temperance and Morality.—The morality of these Indians is fairly good, but like other bands they are fond of intoxicants.

I have, &c.,

ADOLPHE GAGNON,

Indian Agent.

PROVINCE OF QUEBEC,
MONTAGNAIS OF LAKE ST. JOHN,
POINTE BLEUE, August 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1901.

Reserve.—The Montagnais reserve is situated on the northwest bank of Lake St. John, in the county of Chicoutimi, four miles from the village of Roberval. It covers an area of three thousand seven hundred and seventy-nine acres, of which twelve hundred and seventy-five are cleared and cultivated.

Vital Statistics.—The population, according to the census taken in July last, is six hundred and twenty-nine, an increase of one hundred and eighty-four, caused by the return of a great number of absent families who had not visited the reserve for many years, also by thirty-three births against sixteen deaths during the year.

Health and Sanitary Condition.—The health of the band has been fairly good, there was not nearly as much sickness as in previous years. Two-thirds of the deaths were caused by pneumonia.

Resources and Occupations.—Hunting, farming, and acting as guides are their principal occupations. Hunting this year has been very good, and prices for furs fair. The farming on the reserve, I am pleased to say, is progressing rapidly ; at present about one-third of the population depend more or less upon the soil for their support, and their last crop was very promising, but in consequence of the continuous rains during the season the yield was small. The consequence was that all were short of seed for the spring, causing an application for a supply, which the department was pleased to authorize. Tourists were numerous last year, the Indians who follow the occupation of guides made a very good harvest of American coin ; August, September and October are the months during which the guides are kept busy. A reasonable income is also obtained by a few from the manufacture and sale of bark canoes, snow-shoes, moccasins and mittens.

Buildings.—As a general rule the buildings are good and clean ; no more log houses are to be seen, but two new houses were built during the year.

Stock.—The stock, although not improving in breed, is fairly good and well kept, and increasing.

Farm Implements.—Many of the Indians are owners of mowers, horse-rakes, and threshing-machines. As for other smaller implements, they all have a good supply, and are very careful of them during the winter months.

Education.—School matters on the reserve have been progressing favourably ; there is an excellent day school, very well attended during the summer months ; there is generally a smaller attendance of the children in winter, which is caused by their being insufficiently clad for the very severe weather. The teacher, Mrs. O. P. Dufresne, has a first-class certificate. I frequently visited the school during the past year, and always found the children clean and tidy. I regret to say that little, if any, English is taught, it being almost impossible to secure the services of a competent teacher.

Religion.—The majority of the Indians on this reserve are Roman Catholics, the rest belong to the Church of England.

Characteristics and Progress.—The condition of the Indians of this agency is very satisfactory. They have harvested a fairly good crop ; the price of furs is very

high ; a great number of tourists required guides, and there is a large and increasing demand for bark canoes ; all this has enabled them to make a fair living.

Temperance and Morality.—I regret very much to have to report that notwithstanding my efforts to check the abuse of spirits, and whenever practicable the punishment of Indians convicted of drunkenness, as well as of those who supply them the liquor, they continue to drink very hard. Whisky-peddlers often visit the reserve, but the larger portion comes from Roberval, where the whites, regardless of the consequences, still persist in acting as medium between liquor-dealers and Indians. Indians will go as far as St. Jerome and Chicoutimi (75 miles) after liquor. Fines have been paid by intoxicated Indians, as well as by persons convicted of supplying intoxicants to Indians. In every case the Indians obstinately refuse to give information respecting the parties who supply the liquor. In many cases Indians have preferred to go to jail rather than divulge the names of the furnishers. I have known Indians to pay as much as $5 and $10 for a bottle of whisky ; thus I can understand that a poor ignorant farmer will run the risk of supplying an Indian with liquor. But what is beyond my understanding is that people representing large companies doing business with the Indians, who are supposed to be intelligent, and who know full well the consequences, and moreover understand the wrong they do to the Indians, will supply them with liquor in the interest of their business. The excessive use of liquor by Indians causes many diseases, and leads to their being corrupted in their morals.

I have, &c.,

W. T. A. DONOHUE,
Indian Agent.

NEW BRUNSWICK,
NORTHEASTERN DIVISION,
RICHIBUCTO, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report and statistical statement for the year ended June 30, 1901.

Location of Agency and Reserves.—This agency is in northeastern New Brunswick, and embraces the following reserves, namely : Eel River reserve, in Restigouche county ; Pabineau, Saint Peter's island and Pokemouche reserves, in Gloucester county ; Burnt Church, Tabusintac, Eel Ground, Red Bank, Indian Point, Big Hole and Renous reserves, in Northumberland county ; Big Cove, Indian island and Buctouche reserves, in Kent county ; Shediac and Fort Folly reserves, in Westmoreland county. These reserves contain about thirty-four thousand acres. The soil of Big Cove, Eel Ground, Tabusintac, Buctouche and portions of the other reserves is very fertile. Big Hole, Red Bank, Tabusintac and Bathurst reserves are well wooded and contain valuable lumber privileges. There are valuable salmon-fishing privileges in connection with the Bathurst and Big Hole reserves.

The majority of the Indians live on the reserves during the winter season. In summer many of them leave their homes on the reserves and build small huts for themselves and their families in localities where they can more easily obtain employment. When cold weather again comes on, they return to their homes. There are, however, a number engaged chiefly in begging and the manufacture of Indian wares who have removed permanently from their reserves and settled at different points along the railways where they can more easily move about from place to place. The Indians of

Pokemouche and Tabusintac have deserted these reserves and joined the Burnt Church band. There are but two families left on Pabineau reserve, the others having settled on Saint Peter's island, near the town of Bathurst. Many of the Eel River band have left their reserve and settled at New Mills and other points along the railway, in Restigouche county, where they obtain employment in the lumber mills. The Indians of Indian Point, Big Hole and Renous reserves in Northumberland county left these reserves many years ago and settled at Red Bank and Eel Ground. Shediac reserve is unoccupied and only four families remain at Fort Folly.

Tribe.—The Indians of this agency belong to the Micmac tribe, and comprise all the Indians of that tribe in the province of New Brunswick, with the exception of a few scattered along the Intercolonial railway, in King's county.

Vital Statistics.—The population of this agency is nine hundred and twenty-six, a decrease of four since my last report. There are five hundred and eighteen adults and four hundred and eight children. There were twenty-eight births and thirty-two deaths during the year.

Health and Sanitary Condition.—There has been a great deal of sickness, and many deaths have occurred among the Indians during the year. There have been the usual number of cases of consumption and other pulmonary complaints and in addition an epidemic of measles, which carried off a number of children. In the spring all the filth and refuse matter accumulated near the Indian dwellings during the winter were removed and burnt. Many of the dwellings were thoroughly lime-washed inside and outside with lime supplied them by the government for that purpose. Happily the location of the reserves is such that it is an easy matter for the Indians to keep their dwellings and springs and wells free from filth and garbage, and cases of typhoid are rare among them.

Occupations.—The principal pursuits are agriculture, fishing, lumbering and the manufacture of Indian wares. The Indians of all the bands, men and women, engage in the manufacture of tubs, baskets, rustic seats and other wares. The Indians of Burnt Church, Indian Island and some of the Big Cove band engage in sea-fishing, and in winter in smelt-fishing in the rivers. Many of the Indians of Big Cove, Red Bank, Eel Ground and Eel River earn good wages in driving and rafting lumber and carrying deals at the shipping wharves. All do more or less farming and a few of them are beginning to take more interest in their farms than they have done in the past. The greater number of them, however, content themselves with planting a few bushels of potatoes which they do not always take the trouble to cultivate properly.

Buildings.—The majority of the Indians on the reserves live in frame buildings. Those living off the reserves occupy rude huts or shanties, which do not afford them sufficient protection from the cold and wet. Consequently there is much sickness and destitution among them in severe seasons.

Stock.—These Indians keep very little stock.

Farming Implements.—Some of the Indians have supplied themselves with the most necessary farming implements, but the greater number are without ploughs, harrows or seeders, and employ white men with their teams to put in their seed.

Education.—There are three Indian schools in this agency, located at Big Cove, Eel Ground and Burnt Church, respectively. About one hundred pupils attend these schools. Of these, about a dozen attend regularly and are making excellent progress. The Indians, as a rule, take very little interest in education and it is almost impossible to induce them to send their children to school regularly. A number of the Indian children of Indian Island, Red Bank and Buctouche attend neighbouring white schools.

Religion.—The Indians of this agency are all Roman Catholics. They have churches at Big Cove, Indian Island, Fort Folly, Eel Ground, Red Bank and Burnt Church. They are very regular in their attendance at divine worship and take a deep interest in all matters relating to their spiritual welfare. Their clergymen exercise a

strong influence for good over them, and I have to thank the different clergymen for much assistance rendered me in dealing with the affairs of the different bands during the past year.

Characteristics and Progress.—The Micmac Indians of New Brunswick are careless, indolent and improvident, and cannot be made to see the necessity of providing for the future. There is consequently a great deal of destitution among them in winter and spring. There are not more than a dozen Indians who can be said to be progressing. They are, as a rule, good-natured, peaceable and law-abiding.

Temperance and Morality.—The majority of these Indians are temperate, and in this respect there is a steady improvement.

Considering their mode of living, they are remarkably free from immorality and vice.

I have, &c.,

WM. D. CARTER,
Indian Superintendent.

NEW BRUNSWICK,
NORTHERN DIVISION,
FREDERICTON, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1901.

EDMUNDSTON BAND.

Reserve.—This reserve is situated in the county of Madawaska, a half mile below the thriving village of Edmundston. It has an area of four hundred acres, and owing to its situation it is a very valuable property. About two hundred and fifty acres are covered chiefly with a second growth of soft wood ; the remainder is farming lands, made up of intervales and high lands, which, owing to the richness of its soil, are well adapted for farming purposes.

Population.—The total number in the band is thirty-eight—eleven men, seven women, and twenty children, an increase of one for the past year.

Health and Sanitary Precautions.—The health of these Indians has been remarkably good ; there was no sickness of a contagious nature nor any deaths during the fiscal year. Their dwellings are quite a distance apart ; these and their surroundings are kept neat and clean, winter refuse being removed prior to my visit in the month of May last.

Resources and Occupations.—The industries pursued by these Indians for a living consist of farming, milling, hunting, acting as guides, river work, and the manufacture of Indan wares. Agriculture, although the land produces good crops when farmed properly, is not engaged in to any practical extent by most of the band. With the exception of one or two that devote more attention to farming than others, the members of this band prefer such employments as are more agreeable to their accustomed mode of life, and also from which they will receive a speedy return to meet their wants.

Temperance and Morals.—Their morals and habits are good. They are peaceable and respected by their neighbours.

Education.—There are eight children of school age in the band. A few of these are attending the free school in the village, and I am in hopes others will do likewise.

Religion.—All these Indians are Roman Catholics. Their spiritual affairs are attended to by the Rev. L. C. Damour, of Edmundston.

Tobique Band.

Reserve.—This reserve is situated at the junction of the Tobique and St. John rivers, in the county of Victoria, and has a frontage along the St. John river of eight miles. In area it consists of about sixteen thousand acres of forest and farming lands. The forest lands have a fine timber growth thereon that produces a fair yearly revenue. The cleared lands are all of an excellent soil and cannot be surpassed for farming purposes.

Population.—The population of this band is one hundred and ninety-five—fifty-seven men, fifty women, and eighty-eight children, a decrease of five for the past year.

Resources and Occupations.—Industries engaged in by these Indians are farming, acting as guides, hunting, rafting lumber, running rafts, and the manufacture of all kinds of Indan wares. Some ten or twelve members of the band are giving more attention to farming than in former years. Their crops last year were a good average. They are owners of good horses, wagons, and harness, and are giving considerable attention to the raising of cattle, swine, and poultry. The rest of the band are mostly young men, and whilst they do more or less farming, they prefer hiring out at the employments referred to, from which they get good wages. Last winter quite a number of these Indians were engaged in the lumber woods, while those of advanced years were employed largely at the manufacture of moccasins and snow-shoes, all of which command good prices. This reserve being centrally located in the lumbering section of this province, always offers good employment and fair wages to Indians.

Health and Sanitary Precautions.—The health of these Indians has only been fairly good. Last winter there was a great deal of sickness among them, due to scrofula, consumption, grippe, and other diseases, resulting in fifteen deaths, mostly of children. This must be largely attributed to their weak constitutions, as the sanitary conditions and water supply for domestic purposes cannot be excelled.

Temperance and Morals.—The morals of these Indians are good. Most of them avoid the use of intoxicants ; a few, however, will at times indulge in their use, but not to excess. They are peaceable and much respected by their white neighbours.

Education.—There is a day school on the reserve under the supervision of Miss P. M. Goodine, a teacher holding a second-class license. Owing to sickness, and lack of interest in educational affairs by parents, the attendance at times is more or less irregular ; on the whole, however, great benefits are derived from the school. The conduct of the children has been excellent and the regular attendance has resulted in marked progress in their studies.

Religion.—All the Indians of this band are Roman Catholics. Their church on the reserve, erected solely from their own funds, is a neatly finished building. Their spiritual affairs are attended to by the Rev. M. A. O'Keefe, of Grand Falls. All the Indians are regular attendants at church.

General Remarks.—The Indians of this agency are very industrious ; employment is plentiful at good wages. Their services as guides and huntsmen are in good demand, and are very much appreciated by sportsmen who visit the Tobique and other places.

I have, &c.,

JAMES FARRELL,
Indian Agent.

NEW BRUNSWICK,
SOUTHWESTERN DIVISION,
FREDERICTON, July 25, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1901.

This agency consists of four reserves, situated in Carleton, York and Sunbury counties.

WOODSTOCK BAND.

Reserve.—This reserve is situated three miles below the town of Woodstock. It contains an area of two hundred and sixty acres, of which thirty are cleared for cultivation and pasturage. The rest of the reserve, two hundred and thirty acres, is woodland.

Population.—The population of the band and those Indians residing at upper Woodstock is sixty-three, consisting of sixteen men, seventeen women and thirty children ; an increase of five, due to three births and the addition of two adults from the northern part of the province.

Health and Sanitary Precautions.—The health of the band has been remarkably good. There were no deaths in the band during the fiscal year. Sanitary affairs were attended to in the early part of May last.

Resources and Occupations.—The principal industries engaged in by most of the band are the manufacture of all kinds of Indian wares. These articles are in fair demand at fair prices by merchants of Woodstock. A few engage in farming ; only however, to raise sufficient crops to supply their immediate wants. A number of young men work at river-driving, rafting lumber and in the woods, at which they earn good wages. Their condition from the appearance of their dwellings and habits is much improved of late years.

Temperance and Morals.—These Indians, with rare exceptions, avoid the use of intoxicants. Their morals are good, and they live on good terms with their neighbours.

Education.—There are twelve children on the reserve that should attend school. Although I have advised the parents time and again to send their children to a free school in the vicinity of the reserve, yet, owing to their peculiar trait of character they will not take advantage of this privilege, they, as a rule, are uneducated themselves, and are very indifferent about their children's schooling.

Religion.—All these Indians are Roman Catholics, and their spiritual affairs are looked after by the Rev. Father Chapman, parish priest of Woodstock.

KINGSCLEAR RESERVE.

Reserve.—This reserve is situated in the parish of Kingsclear, York county, and is eleven miles from Fredericton. It fronts on the River St. John, and comprises four hundred and sixty acres, of which one hunndred are cleared, fenced and used by the band for farming and pasturage purposes. The rest of the reserve, three hundred acres, is woodland, from which the Indians procure fire-wood for their own use.

Vital Statistics.—The population of the band is one hundred and six, twenty-four men, twenty-six women and fifty-six children ; an increase of five for the past year.

Resources and Occupations.—Their occupations consist of farming, the manufacture of Indian wares, river-driving, rafting lumber and milling. The last mentioned work is engaged in by the young and able-bodied men of the band, and their services are always in good demand at fair wages. A few of the band are giving more attention to farming than in former years. Their crops, principally potatoes, oats, buckwheat and garden produce, were a fair average. Some of the Indians are owners of a few good horses and some cattle, and in most cases their condition is much improved.

Temperance and Morals.—Their habits in these respects are satisfactory.

Health and Sanitary Condition.—The health of the Indians, outside of ordinary complaints or accidents, has been remarkably good ; there being no disease of a contagious nature or any deaths amongst them during the past year.

Education.—The attendance at school of all children of a school age on this reserve has been remarkably good. Their parents take a lively interest in education, and, owing to the regular attendance, and the interest manifested in their welfare by Miss Frances McGinn, their teacher, all of the children have made wonderful progress in their respective studies.

Religion.—All these Indians are Roman Catholics. Their spiritual affairs are attended to by the Rev. Father LeBlanc, who resides on the reserve.

St. Mary's Reserve.

Reserve.—This reserve, situated directly opposite the city of Fredericton, contains an area of only two and a quarter acres.

Vital Statistics.—The population of the band is one hundred and six, consisting of twenty-eight men, twenty-four women and fifty-four children, a decrease of eleven due to removal of Indians to other parts of the agency.

Resources and Occupations.—The members of this band earn a living principally by the manufacture of Indian wares, milling, loading deals in scows, freighting vessels, acting as guides, and more or less hunting. Ready employment, especially in the summer season, is available for Indians at good wages. The reserve being mostly covered with dwellings, farming is confined to a few garden patches that produce potatoes and early vegetables that answer the present wants of the owners.

Health and Sanitary Precautions.—The health of the Indians, apart from those diseases that most Indians are subject to, has been fairly good. No diseases of a contagious nature appeared amongst them during the past year. The water used for domestic purposes is as formerly, supplied to the band by the Boom Company's agent, Mr. Hanneberry. The winter refuse was removed early in spring, and other improvements enforced in the interest of health.

Temperance and Morals.—Most of the Indians are strictly temperate and industrious in their habits, but owing to this reserve being in close proximity to the city of Fredericton, and the parish of St. Mary's, where intoxicants are freely sold, certain Indians, not only of the band, but others from different parts of the agency, will congregate occasionally in this place to satisfy their thirst for liquor. This indulgence, I am pleased to report, owing to the assistance rendered by the police department of Fredericton, is supressed as soon as discovered. Indians in this matter when arrested are very reticent in giving information as to whom they procure the liquor from, and in most cases prefer punishment to giving information.

Education.—The school on this reserve is under the supervision of Miss M. I. Rush, a teacher holding a second-class certificate. The attendance of pupils during part of the year, especially the winter term, is usually fair, but during the September term, owing to the indifference and migratory habits of the band, the attendance is not as good as it should be. The children that attend regularly are making fair progress ; the same cannot be said of the irregular ones.

Religion.—All the Indians of this band are Roman Catholics. A church is in the vicinity of the reserve, and the spiritual affairs of all are attended to by the Rev. John Ryan.

Oromocto Band.

Reserve.—This reserve is situated at Oromocto village, eleven miles below the city of Fredericton. It fronts on the River St. John and contains an area of one hundred and twenty-five acres. Of this thirty-two acres are fenced farming and pasturage lands, the remainder being forest lands.

Vital Statistics.—The population of the band is seventy-six, consisting of twenty-three men, nineteen women, and thirty-four children, a decrease of three, caused by removal to other parts of the agency.

Resources and Occupations.—The resources from which these Indians derive a living are coopering, making canoes, baskets and other kinds of Indian wares. These articles are sold to farmers of the locality, for money if possible ; where money is not available, trade is taken therefor. The rest of their wares are readily sold to merchants at Oromocto and in the city of St. John. The young men of the band hire out and obtain profitable employment of various kinds.

Farming is not engaged in by these Indians to any extent. Most of them, however, plant from three-quarters to an acre of land with potatoes. Last year each family raised from fifty to eighty bushels of potatoes, part of which were sold and flour bought from the proceeds of sale, sufficient in all cases being kept to answer their families' wants.

Health and Sanitary Condition.—Apart from pulmonary and scrofulous diseases, these Indians enjoyed fair health. Their dwellings and reserve are most favourably situated for health.

Temperance and Morals.—Their temperance and morals are most satisfactory. They are peaceable and respected by all classes of people of the neighbourhood.

Education.—There are sixteen children of school age on the reserve, but although there is a free school in the district, only a couple of children can be induced to attend.

Religion.—All these Indians are Roman Catholics. The church at which they worship is on the adjoining land. Their spiritual affairs are attended to by the Rev. Father McDermott. As a rule, these and all other Indians of this supervision are attentive to their religious duties, and with very few exceptions lead moral lives.

General Remarks.—The rest of the Indians of this agency, comprising several small bands, are located in places along the River St. John, Charlotte, King's and St. John counties. Some of these for a living work in mills, &c., whilst the majority follow coopering and the manufacture of Indian wares. All of the Indians of this supervision, with the exception of a band of Micmacs camped at Norton, in King's county, are of the Amalecite tribe. In most cases they are industrious, and unless in sickness, accidents and old age, are largely self-supporting. A vast improvement is noticeable in their dwellings, their mode of dress, and general habits that is encouraging to all persons interested in their welfare.

I have, &c.,

JAMES FARRELL,
Indian Agent.

NOVA SCOTIA,
MICMACS OF ANNAPOLIS COUNTY,
MOCHELLE, August 16, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1901.

Reserves.—There are no Indians living upon reserves ; they occupy lands of their own situated at Lequille, Paradise and Middleton. The reserves at Milford and Maitland are unoccupied.

Population.—The population of this agency is seventy-six, an increase of five since last year. Some of the Indians have returned home again. During the year there was one birth and three deaths.

Health.—The health of the Indians with the exception of one family has been good. Abrim Jerim who came back home again lost two children by consumption.

Occupations.—These Indians are mostly engaged in basket-making, fishing, hunting, coopering, lumbering, stream-driving, and at farming.

Education.—There have been eight pupils attending school at Lequille, and are doing very well.

Temperance and Morality.—These Indians are strictly temperate.

Religion.—These Indians are all Roman Catholics, attending chapel at Annapolis town.

I have, &c.,
GEO. WELLS, Sr.,
Indian Agent.

NOVA SCOTIA,
MICMACS OF ANTIGONISH AND GUYSBOROUGH COUNTIES,
HEATHERTON, September 28, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1901.

Vital Statistics.—The number of Indians in this agency is one hundred and eighty-six, an increase of two over last year. There were eight births and seven deaths, and one Indian joined the band.

Health.—The general health of the Indians has been but fair. Consumption is becoming very prevalent amongst the Indians of my agency.

Buildings.—The heavy gale of wind we had here on October 11 last, caused a great deal of damage to the buildings of the Indians, but they got them all repaired excepting one or two that have to be built new. They seem to be very thankful for the assistance given them by the department to repair their buildings.

I have, &c.,
J. R. McDONALD,
Indian Agent.

NOVA SCOTIA,
MICMACS OF CAPE BRETON COUNTY,
CHRISTMAS ISLAND, October 7, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1901.

Vital Statistics.—During the past year there has been an increase in the band, making the Micmac population of this agency two hundred and fifty. There have been fifteen births, seven deaths and seven who were absent from the agency for some time have returned of late.

Education.—Not many of the children attend school, but those that do are making marked progress, their teacher being a Micmac.

General Condition.—As a rule, the Indians of this agency are sober and industrious, and with the exception of the infirm, aged and crippled, make a fairly good living

I have, &c.,
A. CAMERON, P.P.,
Indian Agent.

NOVA SCOTIA,
MICMACS OF COLCHESTER COUNTY,
TRURO, July 26, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statement of agricultural and industrial statistics for the fiscal year ended June 30, 1901.

Reserve.—The Millbrook reserve is situated three miles south of Truro. It contains an area of thirty-five acres.

Population.—The population of this band is one hundred and nine.

Health.—The health of the Indians has been good during the past year with the exception of an epidemic of measles, also three deaths from consumption.

Occupations.—The principal occupations of the Indians are coopering, rustic work, basket-making, berry-picking and bead-work. The men also work at lumbering and hunting, also acting as guides to hunting and fishing parties.

Education.—The Indians of this reserve have enjoyed the privilege of a school for two years and nine months, and are making good progress.

Characteristics and Progress.—The Indians appear to be gradually bettering their condition ; the last log-hut will disappear this year, and with the opportunity they now have of receiving education they cannot help but improve.

Religion.—The Indians of this county are Roman Catholics. They attend church in the town of Truro.

I have, &c.,
THOS. B. SMITH,
Indian Agent.

NOVA SCOTIA,
MICMACS OF CUMBERLAND COUNTY,
PARRSBORO', August 12, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the fiscal year ended June 30, 1901.

Reserve.—The reserve in this county is situated about fourteen miles from the town of Parrsboro', and contains an area of one thousand acres, a large portion of which is still covered by forest.

Vital Statistics.—On this reserve and scattered over the county there were on June 30, 1901, one hundred and two Indians, a decrease of eight as compared with last year. During the year there were eight births and six deaths.

Religion.—All the Indians in this county are Roman Catholics.

Health and Sanitary Precautions.—During the past year there has been a great deal of sickness, but at the present time the health of the Indians is, with the exception of two or three very old ones, good. The sanitary measures recommended by the department have been carefully carried out, and most of the houses are clean and comfortable, and yards free from rubbish.

Occupations.—These Indians seem to be taking more interest in the cultivation of the soil than in the past, and as a result the crops are looking very well in spite of the severe drought of the summer.

Education.—Most of the children of school age attend school, and as a result nearly all the young Indians can read and write.

I have, &c.,
F. A. RAND,
Indian Agent.

NOVA SCOTIA,
MICMACS OF HALIFAX COUNTY,
SHEET HARBOUR, October 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report for the year ended June 30, 1901.

Location.—This agency comprises the county of Halifax, in which the Indians are located at several points, principally Sheet Harbour, Elmsdale, Dartmouth, Cole Harbour, Bedford, Wellington and Windsor Junction.

Occupations.—The Indians of this agency manage to make a living for themselves, although the department renders individual assistance from time to time and also provides for medical attendance.

The principal occupations are hunting, fishing, basket-making and lumbering.

Religion.—All the Indians of this agency are Roman Catholics.

Education.—In the past Indian children have attended the regular public schools. Now the children do not have the advantage of living near such schools.

Characteristics.—They are generally law-abiding and sober.

I have, &c.,
CHAS. E. McMANUS,
Indian Agent.

NOVA SCOTIA,
MICMACS OF HANTS COUNTY,
SHUBENACADIE, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report and tabular statement for the year ended June 30, 1901.

Reserves.—Indian Brook reserve is located in Hants county and is conveniently situated to the principal towns of this county. This reserve comprises one of the three under my care, and upon which all the Indians now in Hants county live who are engaged in agriculture.

The three reserves in this agency are as follows : West Great Shubenacadie lake, one thousand eight hundred and fifty acres ; Indian Brook, four hundred, and Pon-Hook, one thousand acres.

Tribe or Nation.—All are descendants of the Micmac nation.

Population.—The population now numbers eighty-five.

Health and Sanitary Precautions.—During the year but one death has been caused by consumption, which is very encouraging, as previously most of the deaths were caused by this dreaded disease among the band ; but now as every precaution has been strictly observed, and the Indians are constantly cautioned by Dr. McLean and Teacher Logan, great hopes are entertained by all that this disease has at last been made subject to medical science.

Resources and Occupations.—The Indians during the year have derived most of their support from such work as the manufacture of goods for the sporting market, copper-work, basket-work, but principally by farming, raising such crops as hay, oats and potatoes. Generally speaking, the Indians may be said to be farmers, but as they are apt at many other things naturally, they are found at different seasons of the year at many other callings.

Buildings, Stock, &c.—Their buildings compare favourably with those of the white population, and their stock is about equal and is kept comfortable and in good condition.

Education.—Education is steadily, although slowly at times, making progress, and it is evident to all that the next generation will have more encouragement than the pupils of to-day have from their parents.

Satisfactory progress has been made during the year by the pupils under the patient instruction of their teacher, Mr. Robert J. Logan.

Religion.—All are Roman Catholics, and are in regular attendance at services in the church.

Progress.—Considerable progress has been made during the year in buildings such as remodelling and improving. None seem despondent from sickness and death. The interest in school matters does not flag, and the Indians seem anxious to advance in civilization as fast as possible.

Temperance.—One offence was reported to me during the year as probable, it being claimed that one of the band had brought intoxicating liquor on the reserve. I at once gave it my attention and investigated the matter and learned that there was no truth in the report, but that the slight disturbance was due to another source, and as I was not able to locate the offender, I had to drop the matter.

I have, &c.,
ALONZO WALLACE,
Indian Agent.

NOVA SCOTIA,
MICMACS OF INVERNESS COUNTY,
GLENDALE, July 23, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the year ended June 30, 1901.

Reserves.—There are two reserves in this agency having a combined area of two thousand seven hundred and fifty acres, situated partly at Whycocomagh and partly at Malagawatch.

Population.—The combined population of the two reserves is one hundred and fifty-three.

Health.—There was no epidemic during the year. Otherwise the health of the Indians was usually good. Some cases of sickness did occur, but not more frequently or of more serious character than prevailed among their white neighbours.

Resources and Occupations.—Fishing, basket-making, coopering and farming are the avocations in which the Indians are employed. Farming is the chief industry. Fishing, basket-making, and coopering are merely supplementary, and help to give employment when agricultural work is not very pressing.

Characteristics.—The Indians are a law-abiding, moral, and generally sober people. They are industrious after a fashion, and honest in paying the slight debts they sometimes contract. In any case I have heard no complaints of them on this score for many years.

Religion.—They are all Roman Catholics and much attached to their faith.

Education.—The population at Malagawatch is too limited to support a school, but at Whycocomagh for a great many years past a school has been in operation. All the children learned to read and write, and some of them made some advance in arithmetic, but as on leaving school, they commonly have neither books nor newspapers in after life, many of them have forgotten what they learned and thus have fallen back into illiteracy. A few have retained their school-day acquirements, and these few act for the remainder in cases which require the elements of education.

A new school-house is in course of erection—nearly completed in fact—which is more commodious and will be better equipped than its predecessor. Mr. P. A. Murphy, the teacher, seems well qualified and gives general satisfaction.

General Remarks.—The winter season is always a time of hardship for the Indians. There is scarcely any market there for the objects of their labour—coopering and basket-making—while fishing cannot be prosecuted, and Indians do not yet raise farm products enough to support themselves. Last winter was no exception.

I have, &c.,

D. McISAAC,
Indian Agent.

NOVA SCOTIA,
MICMACS OF KING'S COUNTY,
STEAM MILLS, August 19, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1901.

Reserve.—The reserve is situated at Cambridge, bordering on the Cornwallis river and Dominion and Atlantic railway. It comprises an area of nine and ninety-nine one-hundredths of an acre, and is a sandy plain of no great value.

Vital Statistics.—The population of this band is seventy-four, consisting of sixteen men, sixteen women and forty-two young people under twenty-one years of age. During the year there were three births and three deaths.

Health and Sanitary Precautions.—The health of the Indians has been good. Houses have been whitewashed and the drainage is well looked after. With the exception of consumption there is no infectious disease.

Occupations.—These Indians engage in coopering, basket-making, hunting, fishing and gardening.

Buildings.—The buildings are mostly frame and are comfortable.

Stock.—The stock is of medium quality. It is all private property.

Farming Implements.—The farming implements are poor. They are all private property.

Education.—There are no Indian schools. The Indian children attending the white schools are making fair progress ; the parents being much interested.

Religion.—The Indians are all Roman Catholics. They have no church of their own but attend the Roman Catholic church with the whites.

Progress.—The Indians of this agency are a law-abiding people, industrious and seem this year to be taking more interest in cultivating the soil. One of them, Stephen Knockwood, has taken up a lot of wild land and is making quite a farm for himself.

Temperance.—There is but very little intemperance among these Indians. Their morals are good.

I have, &c.,

C. E. BECKWITH,
Indian Agent.

NOVA SCOTIA,
MICMACS OF PICTOU COUNTY,
NEW GLASGOW, August 20, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report for the year ended June 30, 1901.

Reserve.—The Fisher's Grant reserve, the larger of the two reserves committed to my charge, contains an area of one hundred and sixty-four acres. About thirty-five acres of this is cleared ; the rest is under wood. The land is strewn with rocks and boulders and a great amount of labour is required to make it fruitful. A white man could hardly wrest a living from the entire reserve for his individual family. Here dwell the greater number by far of the Micmacs in this county. They imperatively need more land. The smaller reserve at Indian Island, Merigomish, has at present a population of thirty-three persons. The amount of land cultivated here is insignificant. The Indians have no means to cultivate or fertilize the land. It is their place of pilgrimage in the summer. This island is abandoned during the winter.

Vital Statistics.—The population of this agency is one hundred and thirty-four. The number of births was three and deaths three.

Health.—Poorly fed, housed and clad, the Indians are not very robust. Consumption finds them easy victims and here is the proper environment for its deadly work. Precautions have been taken to prevent its spread as far as circumstances permit.

Resources and Occupations.—The Indians in this agency are very industrious. They make baskets and pick-handles and fish for eels when the rivers are frozen over, and occasionally they work at loading and unloading ships at Pictou Landing. Farming for the reasons given above is not remunerative.

Stock.—The Indians have a few horses but no cows.

Education.—Mr. John Martin, a competent teacher, holding a 'B' license, taught school during the past year with great success, and endeared himself to all by his kindness and assiduity. The children attended well and made gratifying progress. At figures they are particularly apt.

Religion and Morality.—All the Indians of this agency are Roman Catholics. With very few exceptions they are sober, honest and industrious.

I have, &c.,

JOHN D. McLEOD,
Indian Agent.

NOVA SCOTIA,
MICMACS OF QUEEN'S AND LUNENBURG COUNTIES,
CALEDONIA CORNER, August 8, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1901.

Reserve.—This agency comprises three reserves : one located at New Germany, another at Gold River, both in the county of Lunenburg, and the third at Wildcat, in the county of Queen's. The area of each of these reserves is one thousand acres. Besides the Indians living on these reserves, there are others residing at Lunenburg, Bridgewater, Milton Mill village and Greenfield.

Health and Sanitary Precautions.—The general health of the Indians of this agency has been good. The sanitary measures recommeded by the department have been carefully observed.

Occupations.—The Indians on the reserves live chiefly by farming. Those not living on the reserves live by hunting, fishing, basket-making and working in the lumber woods.

Education.—There is only one school in this agency, that at New Germany. The children that attend school are making good progress.

Religion.—The Indians of this agency are all Roman Catholics.

Characteristics.—The Indians of this agency are moral and law-abiding.

I have, &c.,
CHARLES HARLOW,
Indian Agent.

NOVA SCOTIA,
MICMACS OF RICHMOND COUNTY,
ST. PETER'S, July 27, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Reserve.—The Chapel Island reserve contains twelve hundred acres, of which about one hundred acres are in a good state of cultivation.

Population.—The population is one hundred and thirty, an increase of four since last year.

Health.—There was a good deal of sickness amongst the Indians on the reserve during the year. The prevailing disease is consumption, which is evidently becoming more prevalent year after year. Everything possible is done to prevent contagion, but it is most difficult to get the Indians to take the necessary sanitary precautions.

Education.—The school is in an excellent condition under the efficient charge of Miss Boyd, who is most painstaking.

Religion.—All the Indians of the reserve are Roman Catholics, and as a rule practise their religion.

Characteristics.—The Indians are as a rule law-abiding, sober and industrious; but for the many favours shown to them, they are most ungrateful and dogged. The more they get, the more they ask, and the less thankful they are.

I have, &c.,

JOHN FRASER,
Indian Agent.

NOVA SCOTIA,
MICMACS OF SHELBURNE COUNTY,
SHELBURNE, July 3, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1901.

Vital Statistics.—During the past year there has been an increase of five in the band, making the Micmac population of this county seventy-six.

Health and Sanitary Precautions.—The health of the Indians, with the exception of two persons, has been good. The sanitary measures recommended by the department have been carefully carried out.

Occupations.—The principal employments of the Indians consist of lumbering, hunting, making mast-hoops, baskets and working on their farms.

Education.—Very few of the children attend school; they reside quite a distance from the school-houses.

Temperance.—With the exception of one, all are temperate.

Religion.—The Indians in this county are all Roman Catholics.

I have, &c.,

JOHN J. E. DE MOLITOR,
Indian Agent.

NOVA SCOTIA,
MICMACS OF VICTORIA COUNTY,
BADDECK, August 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and statistical statement for the fiscal year ended June 30, 1901.

Reserve.—The Indian reserve in this county is situated at the mouth of Middle river. It contains about six hundred and fifty acres of good land, about one hundred acres of which is good intervale, and about twenty good marsh land. There is about one hundred and sixty acres cleared and in a good state of cultivation, the remainder is covered with spruce and hardwood. The timber is principally second growth.

Vital Statistics.—The population residing on the reserve is one hundred, a gain of four during the year.

Health.—The health of the Indians during the past year has been fair.

Occupations.—Their principal employments are hunting, fishing, coopering and working their farms on the reserve.

Education.—The attendance at school during the past year was good. The average attendance is increasing from year to year.

Religion.—These Indians are all Roman Catholics. There is no church on the reserve. They attend to their religious duties at Baddeck.

Temperance.—These Indians, with few exceptions, are sober.

I have, &c.,
A. J. MACDONALD,
Indian Agent.

PRINCE EDWARD ISLAND,
MICMACS OF PRINCE EDWARD ISLAND,
HIGGINS ROAD, August 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report for the year ended June 30, 1901.

Reserves.—There are two reserves in this superintendency, viz., Lennox Island reserve and the Morell reserve. The former is an island in Richmond bay. It contains one thousand three hundred and twenty acres. The Morell reserve is situated on Lot 39, in King's county. It contains two hundred and four acres of good land.

Population.—There are in this superintendency, comprising both reserves and other localities in Prince Edawrd Island, three hundred and fifteen souls, an increase of eight since the last census. There were fifteen births and only seven deaths during the year.

Health and Sanitary Condition.—The health of the Indians in general has been fairly good. There has been no epidemic during the year.

Occupations.—The principal pursuits are farming, the manufacture of Indian wares, and fishing.

Buildings, Stock and Farming Implements.—The Indians who reside on the reserves occupy frame houses, but those scattered off the reserves live in camps or shanties which afford very little comfort. Those residing constantly on the reserves keep horses, cows, sheep, pigs and poultry. They are well provided with farming implements, such as ploughs, spring-tooth harrows, &c.

Education.—There is but one school, situated on Lennox Island reserve, attended by twenty-four children, and those who attended regularly have made good progress.

Religion.—The Indians are all Roman Catholics. They have a church on the Lennox Island reserve, built five years ago, which is a credit to them. They erected last summer a wire and board fence around the chapel and burial-ground of a costly and substantial nature, and have planted a number of maple and birch trees. This makes the surroundings very pretty and attractive.

Temperance.—On this subject I am happy to be able to report that, with the exception of a few, the Indians residing on the reserves are sober. They organized some years ago a temperance society on the Lennox Island reserve. The members meet monthly under the presidency of Anthony Mitchell ; it has done a great deal of good on this reserve.

I have, &c.,

JOHN O. ARSENAULT,
Indian Superintendent.

MANITOBA SUPERINTENDENCY,
BERENS RIVER AGENCY,
WINNIPEG, September 24, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report as agent in charge of the Berens river and associate bands of Indians for the year 1901.

Agency.—This agency begins at a point about ninety miles from the city of Winnipeg, northward, stretches along both the eastern and western shores of Lake Winnipeg, crosses the boundary line of the province of Manitoba and descends the Nelson, a distance of seventy miles in a northwesterly direction. It also reaches inland from Berens river southeastward one hundred and eighty miles in the direction of Lac Seul.

Reserves.—The following reserves are included in this agency :—Berens river, Hollow Water river, Blood Vein river, Fisher river, Jackhead river, Black river, Poplar river, Norway House, Cross lake, Little Grand Rapids, Pekangekum.

Treaty Payments.—The annual treaty trip is made for the most part in a sail-boat, the property of the department, manned by three Indian boatmen. North of Norway House we are dependent upon the Hudson's Bay Company, which has always provided a York boat for the descent of the Nelson, because our sail-boat is unsuitable in the rapids.

At Berens river again we leave the sail-boat and take to our canoe for the eastern reserves towards the height of land.

The time occupied by this journey varies according to the weather : rain, head winds and violent storms often delay us very greatly.

Our party was composed of the agent, his clerk, Mr. J. P. Wadge, and Dr. C. J. Jamieson, of Winnipeg. The accommodation was not always adequate or comfortable, the hours were very irregular, the difficulties and dangers at times great, but the best of good feeling marked the trip throughout, each sought to add his share to the successful accomplishment of the enterprise in hand.

The work done was heavier this year than usual owing to the taking of the census, but our two months schedule was carried out, with one exception, and that the last one on our list. The return to Winnipeg after treaty was, to our regret, one series of delays, owing to the unsuitable weather prevailing.

Vital Statistics and Health.—The population of the entire agency is two thousand two hundred and twenty-eight, an increase of twenty-nine over last year. The mortality has been rather light and the general health above the average. A slight epidemic of chicken-pox prevailed last spring at Little Grand Rapids. Consumption, that great enemy of the Indian, claimed several victims, among others two promising children from the industrial school at Brandon. Colds, exposure and scarcity contributed to the death-rate but sparingly ; still, many were found in all degress of ill health, and here Dr. Jamieson was a help in time of need. His services were highly appreciated everywhere, and his treatment of interesting cases was most successful. He had few idle moments ; his visit to Little Grand Rapids was specially timely, and the result of the vaccination of scores of people of all ages must prove to be a wise safeguard against a possible outbreak of disease.

Resources and Occupations.—The resources of the people under our charge are in the direction of fishing, hunting, wood-cutting, sawing lumber, stock-raising and farming. At Black river, Hollow Water river and Fisher river, all southern points, most of the stock-raising is done. The animals inspected were for the most part in good condition. Farming is not carried on extensively or with increasing success. Hunting has been slightly in advance of former years. Ample opportunities of obtaining casual employment have presented themselves at centres of activity here and there. The fishing industry is, however, paramount, nearly $80,000 having been paid out by the various fish companies for the purchase of pickerel, whitefish, sturgeon and caviare. Nothing like this has occurred before in the history of the north. It will now be in order to teach the natives of the north how to practise economy, and also to lay aside a portion to meet the demands of the future.

Education.—I found several of the schools closed during my visit, for holidays, and the teachers absent. At other places the attendance was small, and conditions not altogether satisfactory. The exchange of teachers in some places and the employment of temporary assistants in others contributed to this end. However, I am informed that changes contemplated will revolutionize matters in this line, and I expect to find more room for compliment when I return and am in possession of all the facts. I desire to make special reference to the Norway House boarding school, which was in excellent condition and appeared to be efficiently managed. I could wish that more work of this kind should be done in other parts of the agency.

Religion.—I found in every place much regard for the knowledge and worship of God. In two or three places vestiges of an hereditary paganism were found, places where bigamy was tolerated and idol-worship practised. Yet even there might be discovered a hunger for better things. I was impressed with the zeal and self-sacrifice of the missionary workers, whose duty it was to lead these sheep of the wilderness to higher moral levels. Anglicans, Roman Catholics and Methodists engage in this work with organized effort, the last mentioned church clearly leading the way, both in the expenditure of money and in the employment of men.

Characteristics.—The Indians as a whole are law-abiding, temperate and peaceable. The majority are industrious, moral and tractable. They are not free from

failings, but with the help of good men and good government they will rise to something nobler than their former selves. There is room for improvement in their personal habits, in the style of their abodes and in their social relations, and it will be our aim to point them to better things and lead the way.

I have, &c.,

JOHN SEMMENS,
Indian Agent.

MANITOBA,
LAKE WINNIPEG INSPECTORATE,
WINNIPEG, August 23, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my twenty-fourth annual report for the year ended June 30, 1901.

CLANDEBOYE AGENCY.

Reserves.—The three reserves of which this agency is comprised, St. Peter's, Brokenhead river and Fort Alexander, are located around the south and southeastern shores of Lake Winnipeg, and each is traversed by the Red, the Brokenhead and the Winnipeg rivers, respectively. St. Peter's reserve, on the Red river, lies between the town of Selkirk and the lake. A drive along the main highway through the reserve, as it follows the picturesque windings of the river, with its tidy, whitewashed and well shingled dwelling-houses on the one hand and the rapidly broadening Red river on the other, with its numerous fishing skiffs, from which the Indians this year were plying a profitable trade, was about as pleasant and exhilarating as any I have ever taken. A stranger passing thus through St. Peter's, noting the buildings, might be pardoned for looking upon it as an advanced pioneer settlement. Many of the houses are as pretentious as those among the white settlements. Three miles from Selkirk is the Dynevor Indian hospital, a solid-looking stone building, to which this year an extension is being built. Almost immediately across the river rises the tall spire of the St. Peter's church, and adjoining the church is the rectory. A mile below this is the Roman Catholic mission, church and day school. Along the river bank are built at varying distances of about two miles the day schools, all of which, with one exception are as well built and as neatly kept as our public schools in the country. As some of the land on this reserve has been patented and occupied since before the Indians were located here, we still find some very comfortable-looking farmhouses belonging to white men ; notaby among these are James Flett, Duncan McLean, Murdoch McIver and his sons, and James Monkman. These men are nearly all retired Hudson's Bay officers, and have built houses along the river which they never seem to tire in beautifying. The houses are all surrounded by shade trees and beds of cultivated flowers. Their farms serve as an excellent model to the Indians and have, I am sure, a very salutary effect in inspiring them to greater progress.

The large herd of excellent cattle that can be seen grazing along the river banks or on the prairies is a distinguishing feature of this reserve, which is so admirably adapted with its abundant pasturages and extensive meadows for the rearing of stock.

The Brokenhead river reserve is situated along the banks of a small sluggish river of the same name. For three miles the river struggles through reeds to find its

outlet into the lake. Of the three reserves this appars to be the weakest, not only in numbers, but in effort. It is somewhat out of the line of travel for the steamers, and the young men leave it to follow fishing and hunting on other parts of the lake.

There is an ice-house and freezers here of Ewing & Fryer's, and this firm buys all the sturgeon, pickerel, jackfish and catfish that the Indians have for sale. This reserve would be very suitable for stock-raising and farming, the soil is rich and the wide areas of marsh-land towards the lake make excellent runs for cattle.

Fort Alexander reserve is located along the eastern shore of Lake Winnipeg and at the mouth of the Winnipeg river, and as usual in level countries, the banks are somewhat higher at the margin of the stream and gradually become lower as they recede from the water's edge to the level of meadow and marsh-lands. The land can be cultivated for about a quarter of a mile from the river's edge, and further if ditches are made to it. By thus draining the marshes the Indians could be provided with abundance of hay-land for their cattle.

Vital Statistics.—The total population of the three reserves as indicated by the amount paid out at the annuity payments this year is one thousand seven hundred and fifty-eight, an increase over last year of ten. This total was made up as follows :— St. Peter's, one thousand and eighty-seven ; Brokenhead river, one hundred and seventy-seven ; Fort Alexander, four hundred and ninety-four. At St. Peter's there was a decrease of thirteen, at Brokenhead, a slight increase of three, and at Fort Alexander, an increase of twenty. In St. Peter's there were thirty-seven births, eighteen boys and nineteen girls ; and sixteen who had returned to the reserve that were absent last year, a total increase of fifty-three. The total number of deaths was thirty-five, made up as follows :—nine men, five women, eleven boys and ten girls. There was a further decrease of thirty-one absentees who, for various reasons, did not present themselves this year for payment. In Brokenhead reserve there were but six births, two boys and four girls ; nine who were absent last year have returned, making a total increase of fifteen. In the same reserve there were seven deaths, two men, two women, two boys and one girl, and five absentees, making a total decrease of twelve, yet leaving a net increase of three. In the Fort Alexander reserve there were twenty-nine births, sixteen boys and thirteen girls. Seventeen who were not paid last year on account of absence returned this year, thus bringing up the total increase to forty-six. There were eighteen deaths, four among the men, four among the women, two boys and eight girls. Eight persons were absent this year who were present last year to receive their annuity, and this made a total decrease by deaths and absence of twenty-six, but left a net increase of twenty persons on the reserve.

Occupations.—Notwithstanding the many inducements offered in the fishing and lumbering industries, agriculture has made most gratifying progress this year. This may, in part, be attributed to the generosity of the department in supplying the necessary seed, of which the Indians were destitute owing to the drought that prevailed in the province last year.

The Indian follows naturally those occupations characteristic of nomadic tribes the world over. He prefers the excitement, the adventure, of the chase and of fishing, with all their precariousness, to the certain but slow returns from agriculture. There is advancement in agriculture in St. Peter's, but the rapidly developing industries around the lake offer strong inducements to the younger men, who are just as prone to drift towards industrial centres as our young white men are. The fishing on the lake this year seems to have been phenomenally good. There has been a great demand for catfish by the fish companies for export, and Indians are making from $15 to as high as $40 a week, and this is paid in cash. The tugs travel around the lake collecting the fish daily, and the Indian is paid in cash by the captain on board the tug. This distribution of so much ready money has made a startling difference in the appearance of the Indian and his family. The style and quality of material of their dress have greatly improved. Added to this increased

activity in the fisheries is the increase this year in their crops of wheat and oats, potatoes and vegetables. The hay crop is abundant and is easily reached and easily cut. The merchants of Selkirk inform me that many of the Indians to whom they had given credit during the winter, expecting to pay for the goods from their annuity money, settled their accounts before the payments were made, by the money they earned at fishing. Another trader informed me that a large stock of ready-made suits that he had taken down to sell at from $6 to $7 were left on his hands unsold, but the fewer and more expensive suits that he took with him, and which sold at from $12 to $15, were disposed of readily. But fishing and agriculture are not the only occupations open to Indians around Lake Winnipeg. In the summer there are saw-mills at Brokenhead, at Hole river, and at Fisher river, and also planing-mills at Selkirk. There are lumber camps and wood camps, in the winter, throughout the lake country. These all give ample opportunity for labour and the employers pay promptly. The increased price of fur still attracts many to follow the chase. During the year ended June 30, 1901, the Indians of St. Peter's sold furs to the value of $1,082.46 ; those of Brokenhead sold to the value of $332.14 ; those of Fort Alexander, $2,229.19. It must not be inferred from the above figures that the number of skins is large ; on inquiry I found that very high prices were paid for some that are becoming exceptionally scarce. Last winter $140 was paid at Fort Alexander for a black-fox skin ; $40 was paid at the same place for a choice bear-skin.

Religion.—The spiritual needs of the Indians in the agency are well looked after. There are a number of stationed missionaries and good, comfortable churches on the whole three reserves. In St. Peter's the Rev. J. G. Anderson, the Rev. Father Magnan and Mr. Sharpe labour faithfully among the Indians, representing denominationally the Anglicans, the Roman Catholics, and the Baptists, respectively. Each has a commodious, well-built church, all of which are well attended. Services were held every evening during the week I was in St. Peter's paying annuities. I noticed one evening four services going on simultaneously on different parts of the treaty grounds.

At Brokenhead, the Rev. R. E. Coates has charge of the Anglican mission. At Fort Alexander, the Rev. Edward Thomas administers to the spiritual wants of the Anglicans, and Father Valles to those of the Roman Catholics both at Fort Alexander and Brokenhead.

There was a strange attempt this year to revive the practices of heathenism at Brokenhead and Fort Alexander. The dog feast was duly observed. A circle was described and marked off by sticking bushes in the ground ; within the circle were gathered the chief and perhaps a dozen of the older men and about a half-dozen young men. Two or three tom-toms supplied the music, if it may be so called, and the dance was kept up spasmodically for the whole day. Some were decked out in all the old finery they could get, and one had tied around him a string of sleigh bells. The pipe was filled and passed around, each taking a few puffs. In the centre of the circle was placed a large dish, filled with cooked dog-meat, of which all partook. While we were at Fort Alexander a few of those, who apparently had been leaders at Brokenhead, came and organized a feast carried on in the same way. As I was passing, one of the older men stood up and addressed me in explanation. He referred to the feasts of years ago when they were held as they were preparing to go to war ; now these feasts had no such significance. They were on good terms with all their fellow-men ; it was simply a rite of their religion. He said much more that was an attempted plea or justification for this sudden revival of the practices of paganism. I offered no opposition to these sudden revivals. Christianity is too firmly established on these reserves to make the practice of paganism at all possible for any length of time. It is only a few of the older men who cannot shake off the memory of the past and its superstition. Any younger ones who join in, do so from love of the excitement and the novelty.

Farming Implements.—There has been a keen demand for improved farming implements this year. In St. Peter's there were fifty-nine ploughs, fifty harrows, eighty-four mowers, sixty-nine horse-rakes, seventy wagons, seventy-seven sleighs, thirty-two

democrat wagons. Many of these implements are old and not of much use. The department this year supplied some ploughs, harrows and some smaller tools. I found this year that one of the machine companies had one of the Indians, W. D. Harper, acting as agent, selling mowers, rakes, wagons, &c. I found that he had been very successful and there was no difficulty in regard to the payment for them.

Education.—I have visited the schools on the three reserves several times through the year. They are pretty well attended at St. Peter's. There have been no changes among the teachers, except that Angus Prince has given up the one in which he was engaged, and a young man by the name of Cushing appointed in his place. He makes a very good teacher. Mr. Wilson, at Fort Alexander, has also resigned, and his place is filled by Sydney B. Barrett, who was teaching last year at Black River. Some new desks have been placed in the North St. Peter's school which were much needed, as the building is a chapel and there were no desks suitable for small children. Frederick McLean is conducting school at Brokenhead. He is a faithful and painstaking teacher, and consequently the advancement of the children in education is very gratifying.

General Remarks.—Year by year the annual gathering at St. Peter's for treaty payment grows in importance. Owing to our proximity to the town of Selkirk, to which many persons resort in summer from the city and all parts of the province, and to the fact that excursions are run by the boats every afternoon and evening, we have a gathering often of from two to three thousand people. The traders' tents, arranged by streets and avenues, the dancing-halls, the church bazaars and dining-halls, all make an interesting scene. The din is the din of an old country fair. The staff and pupils of St. Paul's industrial school camped with us, and the smart, neat appearance of the children, and their athletic and military exercises each evening drew a large crowd and offered a strong contrast between the old and the new generations, surrounded by such vastly different circumstances. We had some difficulty this year from several attempting to bring liquor on the grounds. Two half-breeds and an Icelander came there at different times, but each was apprehended about as soon as he arrived and sent before Police Magistrate Scott, of West Selkirk, by whom they were fined $50 each. They all paid the fine, but one served a month before he could raise the money, which he did by hypothecating his scrip.

After completing payments at Fort Alexander, I proceeded north on my annual tour of inspection of the reserves of the

BERENS RIVER AGENCY.

General Remarks.—I found the Indians in better condition than they have been at any time during my twenty-four years among them. This was owing to the prosperous condition of the fishing industry and the extensive lumber interests of Captain Robinson, of Selkirk, with either of which industries nearly every Indian is more or less intimately connected, and from which he draws an ever-increasing yearly revenue. The fishing industry is carried on extensively in Winnipeg and Playgreen lakes by the Dominion Fish Company, the Northern Fish Company, Ewing & Fryer, and the J. K. McKenzie Fish Company.

Black River Band.

Resources.—I first visited this reserve and found the chief, John Sayer, one of his councillors, and a number of Indians at home. The potato crop was indifferent, owing to the flooded state of the reserve from the lake, the waters of which are two feet higher than in former seasons. There are no cereals of any kind sown on this reserve. The Indians derive their living principally from fish. In winter they do some hunting.

Education.—There is a church here and a rectory, and a new school-house is in course of erection. The Indians here are peaceable and law-abiding. Mr. Sydney B. Barrett, teacher, was removed from here to Fort Alexander, and Mr. Thomas, of Jackhead River, is appointed in his place.

Hollow Water River Band.

Resources.—I next inspected this reserve and found John Hardisty, chief, and a number of other Indians on the reserve. Most of the members of this band are engaged in working at the saw-mill in the vicinity at Bad Throat river, and taking out logs and ties during winter. They planted but very few potatoes. They are doing very little commercial fishing. Some of the band do a profitable business in fur-hunting.

Education.—The school is conducted by John P. Sinclair, who also acts as a Church of England missionary. There is a good school-house on the reserve, well furnished with the necessary conveniences for conducting the school.

Blood Vein River Band.

The Indians of this band have not made much improvement on the reserve. They spend most of their time fishing and hunting. Mr. Fisher, the councillor, is determined to start a school on the reserve, and with this in view has erected a building for the purpose. The Indians have only two or three buildings on the reserve as yet.

Fisher River Band.

Reserve.—This band is located on a river of the same name which empties into a deep bay on the western shore of Lake Winnipeg. The reserve is of exceptionally fertile soil, but it is frequently flooded from the lake, especially when the wind is in the north. The potato crop is excellent. There are some cereals sown here, and I noticed especially some fields that looked remarkably well. The Indians have large herds of cattle which in numbers approximate those at St. Peter's. One-half of their hay land is flooded with water, but they think they can get hay enough for the stock.

Industries.—The Indians subsist by working in Robinson's mill, close by, by fishing for pickerel and gold-eyes in the bay, and hunting fur and game.

Mr. Steinhauer, the missionary, is the dispenser of medicines. On this reserve there is a parsonage, a new church and a bath-house. Two traders, Messrs. Rogers and Rosen, have established stores on the reserve where the Indians can purchase food and clothing.

Jackhead River Band.

Reserve.—This land is situated along a small sluggish stream of the same name. This community is a fragment of the Island band and has only one councillor, Travers. This reserve is swampy, and very little land on it is fit for cultivation. Along the banks of the river there are some dry spots which are planted with potatoes, but this year the crop is not very promising.

Stock.—The Indians have a small herd of cattle, for which it will be difficult to secure sufficient hay, owing to the flooded state of the reserve.

Occupation.—They make a comfortable living selling fish to the commercial fish companies. They did not do much at the fur business last winter.

Education and Religion.—The school on the reserve was conducted by Mr. Sandison, a student of St. John's College. A church is on the reserve, built by the Anglicans, and the pastor is the Venerable Archdeacon Settee, who is over ninety years of age.

Berens River Band.

The chief, Jacob Berens, was away from home when I visited this reserve, but Councillor Antoine Gouin, who was severely ill with inflammatory rheumatism, was on the reserve.

Agriculture.—Very little potatoes were planted, and the rain destroyed about one-half of the crop. There is no increase in the number of the cattle, and a sufficient quantity of hay is obtainable for them, if the Indians secure it.

Education and Religion.—Here there is a good parsonage and chapel. Rev. Mr. McLachlan is the pastor and dispenser of medicine, and his influence is very widely felt. A school-house is on the reserve, but there is no teacher. A competent person is expected to be supplied from Ontario this fall.

Resources.—The Indians obtain their livelihood chiefly from fish, fur and game.

General Remarks.—Here was the headquarters of the former agents, and Rev. Mr. Semmens, the present agent, resides here in the meantime. He was away making payments to the Indians during my visit. Throughout all the reserves in his agency he gave the utmost satisfaction to the Indians. I did not discover any error or discrepancy in his payment of annuities. He is a model Indian agent.

Poplar River Band.

The Indians of this reserve were all at home. They paid all their debts at treaty time, and had some money to spare.

Resources.—They subsist largely on fish, fur and game.

General Remarks.—Rev. Mr. Dargue is the school teacher, medical dispenser and pastor of this band. This year he is building a large chapel, surrounded by a grove of spruce, in a very picturesque situation. Mr. Dargue deserves much credit for the interest manifested in the welfare of his Indians. When he went to Poplar River the Indians were the most poverty-stricken in the agency, their clothing was nothing but rags, they were illiterate and indolent ; but now they are industrious and thrifty, and are clad in comfortable costumes.

Norway House Band.

Resources.—This is a very populous reserve. Most of these Indians have small patches of potatoes, but owing to their not having sufficient seed, they did not plant as much as last year. Since the fishing companies commenced extensive operations in Playgreen lake and in the northern part of Lake Winnipeg, these Indians, if it were not for their improvidence, would make independent fortunes, as they are paid in cash for the enormous quantities of sturgeon, whitefish, pickerel, jackfish and other varieties that are caught. Their suits of clothing, shoes and hats, are equal to those of any settlers in this province. They kill some game and fur-bearing animals, which bring them remunerative prices.

Stock.—Remote as these Indians are from the settled portions of this province, and notwithstanding the scarcity of hay, they have a considerable number of fine cattle, but in consequence of the flooded state of their meadow-lands, they are apprehensive that they will not have sufficient hay to winter them.

Education.—Rev. John McDougall, superintendent of Methodist Indian missions, whom I met at Rossville, the Indian village, is well qualified for his position. He had a long interview, lasting till half-past one in the morning, with the Indians about the boarding school which is erected on the reserve. He spoke in Cree, and ably met every objection they raised about the institution and its management. The

boarding school is large and commodious, and amply supplied with a variety of food. Its competent staff consists of Mr. E. F. Hardiman, principal, Miss Annie Yeomans, matron, Miss Hannah Riley, seamstress, Dr. Lillian Yeomans, teacher, and Peter Murdoch, carpenter and gardener. Fifty-six pupils are in attendance ; twenty-seven boys and twenty-nine girls. The boys are employed half a day in school and half a day at general work, viz. : cutting wood, scrubbing, gardening, &c. The girls are engaged half a day in school and the other half in knitting, sewing, practising on the organ, and in general housework and cooking.

General Remarks.—Rev. Mr. Nelson is pastor, and dispenser of medicines, to the band, and was manager of the building of the boarding school. He has a fine parsonage and a capacious chapel, where, on Sunday, Rev. Mr. Ferrier preached in English and Rev. Mr. McDougall in Cree, to a large and attentive congregation. On Monday night the children of the boarding school gave a most enjoyable entertainment in the chapel.

Cross Lake Band.

As Chief Peter Ross and Councillor Thomas Ross, and twenty-three of the principal men of the band, came to Rossville as witnesses in the trial of Helen Frog, for murder, I interviewed them there.

Resources.—Their potato crop is much larger than last year and very promising. They subsist by fishing, hunting and gardening. They killed a large number of rats, and the chief alone shot six moose.

Education.—The school is closed, and the chief wants a well qualified teacher sent to open the new one which they are building. Papanakis, a native missionary, is the pastor on this reserve.

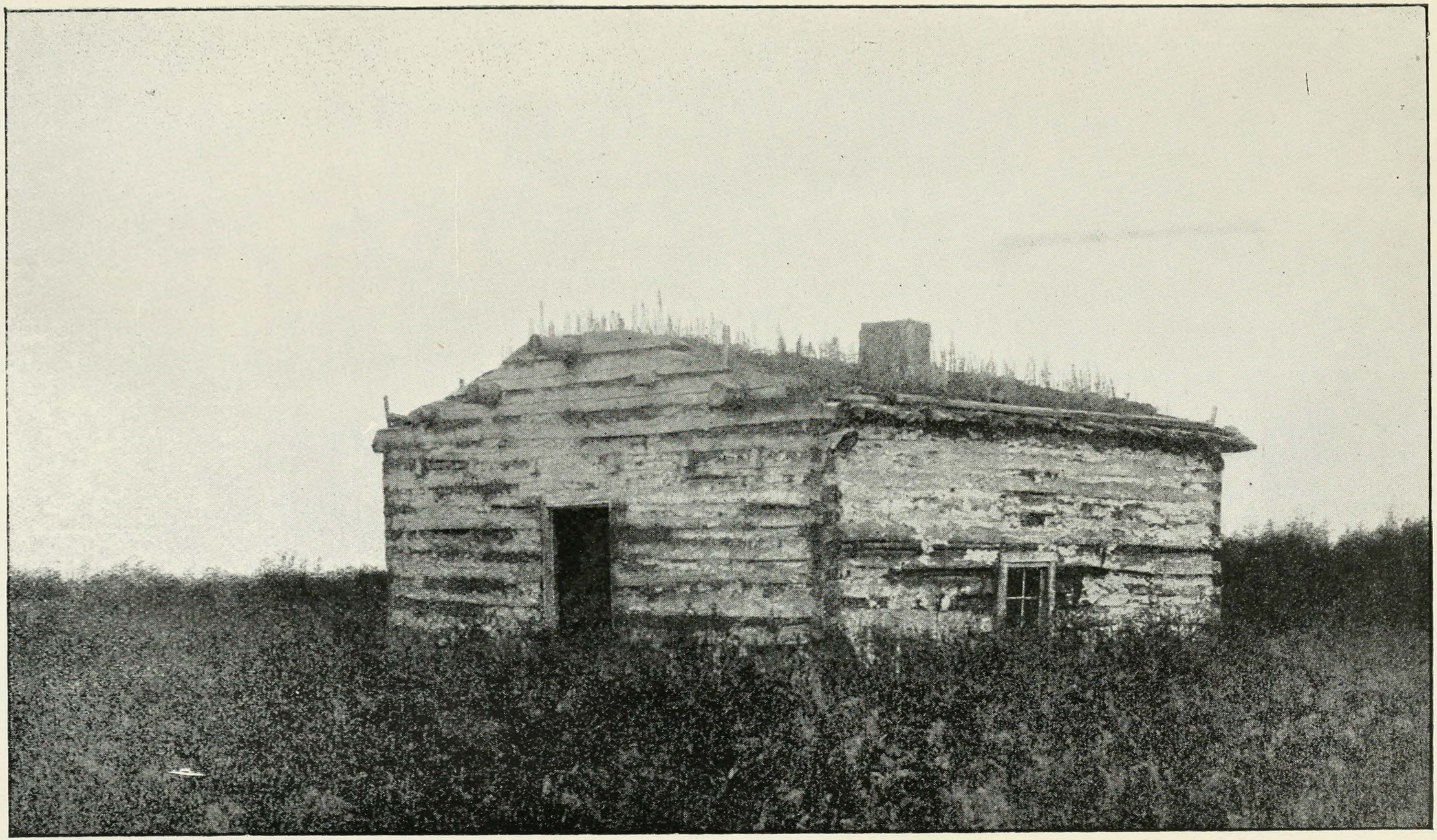
General Remarks.

The sanitary regulations of the department are faithfully carried out. All rubbish is gathered in heaps, fenced around, and set fire to, in order to protect the cattle from the flies. Thus all refuse and chips are burnt up. Most of the houses are whitewashed within and without with lime, so that diseases engendered by want of cleanliness are fast disappearing. Cases of scrofula and consumption are still prevalent among the Indians. Doctors Steep and Jamieson are strenuously endeavouring to alleviate the suffering of their Indian patients by prescribing medicines, leaving drugs in their absence with dispensers at different points, and giving directions how to use them.

I have, &c.,

E. McCOLL,

Inspector of Indian Agencies.



First House of Chief Samson, Hobbema Agency, N.W.T.

MANITOBA SUPERINTENDENCY,
RAINY RIVER DISTRICT,
COUCHICHING AGENCY,
FORT FRANCES, ONT., August 9, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report, with agricultural and industrial statistics, together with inventory of government property under my charge, up to June 30, 1901.

Agency.—The agency buildings are situated at the mouth of Rainy lake, on what is known as Pither's point, about three miles east of Fort Frances, and the agency comprises the following bands, viz., Hungry Hall, Nos. 1 and 2 ; Long Sault, Nos. 1 and 2; Manitou Rapids, Nos. 1 and 2; Little Forks, Couchiching, Stangecoming, Niacatchewewin, Nickickonsemenecanning, Seine river and Lac la Croix, being thirteen in all.

HUNGRY HALL BANDS, NOS. 1 AND 2.

Reserves.—These reserves, Nos. 14 and 15, are situated near the mouth of the Rainy river, and contain six thousand two hundred and eighty acres. The timber on reserve No. 15 is of poor quality, as fires have frequently run through it during past years and destroyed most of the merchantable timber; but on reserve No. 14 there have never been any fires and there are large quantities of tamarack, spruce and cedar.

Tribe.—All the Indians in this agency belong to the Ojibbewa tribe.

Vital Statistics.—The population of the two bands is fifty-three, consisting of fifteen men, twenty women, nine boys and nine girls.

There have been three births and three deaths during the year.

Health and Sanitary Precautions.—Their general health has been fairly good. In May last several cases of small-pox broke out at Beaver Mills among some half-breed families who were living in what was called the Indian Colony, where the majority of these bands were living and working principally in the saw-mill and lumber yard. The prompt and effectual steps taken by the local and provincial authorities soon stamped out the disease, and none of the Indians caught it, although a number were quarantined. All of the Indians have been vaccinated in this agency within the past four years, and about four hundred have been operated on since last April.

Resources and Occupations.—The majority work at the saw-mill and in the lumber camps. During the past winter these Indians made on their own reserves, from dead tamarack, seven thousand three hundred and twenty-five railway ties.

Religion.—The majority of the Indians are pagans. A few belong to the Church of England.

Education.—There is no school in operation on these reserves.

Temperance.—The majority of these Indians are addicted to the use of intoxicants, which they get principally on the American side.

LONG SAULT BANDS, NOS. 1 AND 2.

Reserves.—These reserves, Nos. 12 and 13, are situated on the north bank of Rainy river, opposite the rapids of that name. Their combined area is eleven thousand four hundred and thirteen acres.

Vital Statistics.—There are on these reserves twenty-one men, thirty women, twelve boys and nineteen girls, making a total of eighty-two.

There was one birth and five deaths during the year.

Resources and Occupations.—These reserves are well adapted for farming and stock-raising. The land is a rich black loam, with a clay bottom. A great deal of the timber has been destroyed by frequent bush fires in past years, yet there is still a considerable quantity of tamarack, spruce and cedar. During the past winter these bands have taken out nearly ten thousand railway ties, for which they got 18 cents each. They also did considerable clearing of the right of way through their reserve, for which they received about $750; besides making over $1,000 from sturgeon-fishing last spring.

Several of these Indians are engaged as pilots of the steamboats. Blackbird, the chief of No. 1 Band, is pilot on the *Keenora*. Another, McGuire, is captain of the steamer *Maple Leaf*, and John Cochrane is pilot on the *Shamrock*. They get from $40 to $60 per month.

Buildings.—The majority of their houses are well built and very comfortable and fairly well furnished.

Education.—There is a very good day school here under the auspices of the Church of England, which is taught by Miss Mary A. Johnson, an excellent teacher, who takes great interest in her work.

Religion.—The Church of England has a very good church here, with a resident missionary, Rev. J. Johnstone, who looks after the religious welfare of all the bands on the Rainy river. There are only thirteen who profess to be Christians ; these are all Anglicans, the rest are pagans.

Temperance.—These Indians, I regret to state, are intemperate, and owing to their proximity to the American boundary can frequently get all the liquor they want.

MANITOU BANDS, NOS. 1 AND 2.

Reserve.—These bands occupy reserve No. 11, which is situated on the north bank of the Rainy river, opposite the rapids of that name. The area is five thousand seven hundred and thirty-six acres.

The land is of rich clay loam, and there is a considerable quantity of merchantable timber such as tamarack, spruce and cedar, although frequent fires in the past have destroyed a large portion. A large quantity of pine was blown down some four or five years ago. This will be taken out and sold during the coming season.

Vital Statistics.—The population consists of twenty-six men, twenty-nine women, thirty boys, and twenty-three girls, making a total of one hundred and eight. There have been five births and twelve deaths.

The majority of deaths were in band No. 2, the members of which do not permanently reside on the reserve, being away fishing and hunting nearly all the year.

Health.—There was considerable sickness in this and all the river bands last winter from grippe, which was very severe both among whites and Indians in this district.

Resources and Occupations.—These Indians are all good axemen and can always get employment in lumber camps at good wages. Since December last they have taken out over ten thousand railway ties. They cleared all the right of way through their reserve, for which they received over $1,100 ; besides making over $900 at sturgeon-fishing.

Buildings.—Some have very good houses, but the majority are of a poor class.

Education.—There is a day school on this reserve, but the progress is very slow, owing to the irregular attendance in the past. A marked improvement has been shown during the last two quarters, owing, I think, to fear, as they were given to understand that, if they did not attend regularly, they would be sent to some boarding or industrial school.

Religion.—These Indians are all pagans, not a single one claiming to be a Christian.

Progress.—In my opinion, band No. 1 is the most industrious in this agency. One, Red Hawk, a councillor, is worthy of mention. This man drew $1,137 for railway ties and work on the right of way. At one time I paid him $412 in cash.

Temperance.—I regret to have to say that these Indians are very much addicted to the use of intoxicants.

Little Forks Band.

Reserve.—The reserve of this band is situated on the north bank of the Rainy river, twelve miles east of Fort Frances, and is designated as No. 10. It contains an area of one thousand nine hundred and twenty acres.

Vital Statistics.—There are twelve men, sixteen women, nine boys, and ten girls ; forty-seven in all. There were two births and no deaths during the year.

Health.—The general health of this band has been good.

Resources and Occupations.—These Indians have many occupations open to them, as have all the bands on the river, in getting out timber and cord-wood, working for farmers, lumber camps, steamboats, and hunting and fishing. They are on the whole good workers and industrious.

Education.—There is a good day school on this reserve, but there are only six children of school age at present in the band. The attendance has been very regular during the past two quarters.

Religion.—There are only three members of this band who claim to belong to the Church of England. The rest are pagans.

Progress.—These Indians are fairly industrious. Five families took out two thousand four hundred railway ties ; the others were employed in lumber camps during the winter.

Temperance.—This band is fairly temperate.

Wild Land Reserve, No. 15M.

Reserve.—This reserve, consisting of twenty thousand six hundred and seventy-one acres, is owned in common by all the above-mentioned Rainy river bands. It adjoins the Hungry Hall reserves on the east, near the mouth of the Rainy river.

This reserve is well timbered with spruce, tamarack, cedar and pine. During last summer bush fires burnt a large quantity of pine, which the department very wisely disposed of last winter to Messrs. Hughes & Long at Beaver Mills, before it had begun to deteriorate in value.

Couchiching Band.

Reserves.—The reserves of this band are situated on Rainy lake and Stangecoming bay, three miles north of Fort Frances, and are designated as 16A, 16D, and 18B. They contain an area of fifteen thousand nine hundred and forty-seven acres.

Vital Statistics.—Thirty-one men, forty-three women, thirty-five boys and twenty-five girls constitute the population, making a total of one hundred and thirty-four. There have been two births and seven deaths during the year.

Health and Sanitary Precautions.—There has been considerable sickness during the past six months from grippe and measles, both epidemics being very severe. Due precautions are taken in having all garbage removed from the dwellings of the Indians

Resources and Occupations.—The resources of this band are many, but they principally consist of working in lumber camps, cutting cord-wood, fishing and hunting. These Indians took out nearly five thousand ties and over six hundred cords of dry wood. They also cleared about one and a half miles of right of way through their reserve.

Buildings.—The houses are well built and very comfortably furnished. A number have lace curtains on the windows and all are kept very clean.

Education.—There is a day school here, but the building being very old and out of repair, a new one will be built this season. There are twenty-six children of school age in this band.

The attendance has not been as regular as it should, and the progress is not very satisfactory.

Religion.—There are one hundred and two Roman Catholics, three Anglicans and twenty-nine pagans.

The band is building a new church on the reserve, which will be a very substantial building when finished. The Indians manifest great interest in church matters. Rev. Father Allard has charge of this mission.

Progress.—The majority of this band, who are French half-breeds, are an industrious and law-abiding people.

Temperance and Morality.—On the whole this band is a temperate and moral community.

Stangecoming Band.

Reserve.—This reserve, No. 18C, is situated about eight miles north of Fort Frances on Rainy lake, and contains three thousand eight hundred and sixty-one acres. The greater portion of this reserve is barren rock ; in fact, I do not think there is ten acres of arable land on it, and the timber is of poor quality.

Vital Statistics.—The population consists of fifty-two persons : eight men, nine women, twelve boys and twenty-three girls. There has been one birth and one death during the year.

Resources and Occupations.—These Indians live mainly by fishing, hunting and working in lumber camps.

Education.—There is a day school here, which has been closed for several years, but it is proposed to reopen it this season. There are sixteen children of school age in this band.

Religion.—One woman belongs to the Church of England ; all the other Indians are pagans.

Temperance and Morality.—They are a fairly temperate and moral people.

Niacatchewenin Band.

Reserves.—The reserves allotted to this band are 17A and 17B, and are situated about twenty-six miles northwest of Fort Frances, on Northwest bay of Rainy lake.

The area of these reserves is six thousand two hundred and one acres. There is considerable arable land, but the greater portion is rocky and broken.

Population.—There are ten men, thirteen women, fourteen boys and seventeen girls, making a total of fifty-four . There have been five births and three deaths during the year.

Resources and Occupations.—The able-bodied men of this band are employed in lumber and tie camps during the winter, and on drives during the summer. A number, however, do nothing but fish and hunt for a living.

Religion and Education.—All the members of this band are pagans. There is no school on this reserve. There are sixteen children of school age.

Nickickonsemenecanning Band.

Reserves.—This band owns reserve 26A, on Red Gut bay, reserve 26B, on Porter inlet, and reserve 26C, on Sandy Island river, Rainy lake. Their combined area is ten thousand two hundred and twenty-seven acres, a considerable portion of which is heavily timbered.

Population.—The population of this band is eleven men, sixteen women, seventeen boys and twelve girls, making a total of fifty-six. There has been one birth and two deaths during the year.

Resources and Occupations.—The majority of this band do nothing but fish and hunt for a living, though some of the young men work in lumber camps.

Education.—There is no school on this reserve, but there are fifteen children of school age.

Religion.—There are seven Christians ; the rest of the Indians are pagans.

Rivière la Seine Band.

Reserves.—This band has two reserves : No. 23A extends from Wild Potato lake to Sturgeon falls on the Seine river ; reserve No. 23B is at the mouth of the Seine river. They contain a combined area of eleven thousand and sixty-three acres.

Population.—The population consists of thirty men, thirty-five women, thirty-four boys and thirty-nine girls, making a total of one hundred and thirty-eight.

Resources and Occupations.—Very few of these Indians reside on their reserves, being away fishing and hunting nearly all the time. Those that remain on the reserve live principally by fishing and hunting.

Religion and Education.—These Indians are all pagans. There is no school on the reserve, and there are thirty children of school age in the band.

Temperance.—A large number of this band are addicted to the use of intoxicants.

Lac la Croix Band.

Reserve.—The reserve, No. 25D, belonging to this band, is situated on Lac la Croix, near the boundary, and contains fifteen thousand three hundred and fifty-five acres.

Population.—There are nineteen men, thirty women, twenty-four boys and thirty-six girls, making a total of one hundred and nine.

Resources and Occupations.—The principal resources of these Indians are trapping, hunting and fishing. Very little gardening is done by this or any of the lake bands.

Buildings.—They have a very poor class of houses.

Education and Religion.—There are thirty-two children of school age, but they have no school. There are three members of the Roman Catholic Church ; the rest of the Indians are pagans.

General Remarks.

I took charge of this agency in September last, having been transferred from the Crooked Lake agency, Treaty No. 4. I find that the resources and occupations of the Indians here are more varied than in the Territories, where they have to depend principally upon farming and stock-raising. Here they can always find employment in lumber camps, on drives and in mines, making railway ties, cutting cord-wood, in the large wild rice-fields, good hunting and fishing ; these, with their gardens, afford them a good living. On the whole they are good axemen and industrious, but the principal drawback is intemperance, which it is difficult to contend with, owing to the proximity of the Indians to the United States, though I am informed that this evil is much less than in former years.

I have, &c.,

JOHN P. WRIGHT,
Indian Agent.

Manitoba,
Portage la Prairie and Manitowapah Agencies,
Portage la Prairie, September 12, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit the following annual report of my agencies for the year ended June 30, 1901.

PORTAGE LA PRAIRIE AGENCY.

Reserves.—There are five reserves in this agency, viz. :

Roseau River reserve, situated at the confluence of the Red and Roseau rivers, has an area of thirteen thousand three hundred and fifty acres. It is well adapted for farming and stock-raising, as there is plenty of hay and the soil is a rich black loam. The reserve is level prairie with sufficient wood for fuel and timber along the streams large enough for small buildings.

Roseau River Rapids reserve, situated on the Roseau river, about eighteen miles from the mouth, has an area of eight hundred acres and is well adapted for grain-growing. It has the advantage of having a higher elevation than the reserves at the mouth of the river, although there are patches of light soil not good for much. But being in the midst of a splendidly settled district, the Indians gain much from the example around them and are trying hard to become good farmers.

Long Plain reserve is situated about fifteen miles southwest of Portage la Prairie, on the north side of the Assiniboine river, in township 10, range 8, west of the 1st meridian. It has an area of ten thousand eight hundred and sixteen acres, is well wooded, but the soil is too sandy generally for farming.

Swan Lake reserve is on the north side of Swan lake, in township 5, range 11, west of the 1st meridian, and contains nine thousand six hundred and thirty-four acres. It is well adapted for grain and stock-raising, as there is plenty of hay and water, and it is surrounded by a good wheat-producing country.

Indian Gardens reserve is situated near the south bank of the Assiniboine river. It comprises section 11, in township 9, range 9, west of the 1st meridian, and contains six hundred and forty acres. It is all first quality arable land without any wood of any kind, and very little hay.

Tribe.—The Indians in this agency are all of the Ojibbewa tribe, with more or less strain of white man's blood.

Vital Statistics.—The population of the different bands present at the last annuity payments is as follows :—Roseau, including the Rapids, two hundred and thirty-six ; Swan lake, including Indian Gardens, one hundred and eleven ; Long Plain, one hundred and twenty-four ; making a grand total of four hundred and seventy-one.

Health and Sanitary Precautions.—The health of the Indians this year has been fairly good, no epidemics have prevailed and the majority of deaths can be charged to consumption in its different phases. Scrofula, no doubt, has a great deal to do with many of the ailments of the Indians and shows very much more plainly on some reserves than others.

The usual sanitary precautions have been taken on all the reserves, such as white-washing, cleaning up and burning refuse. Nearly all the Indians move out of their houses into tents in the spring, and this, under their conditions of living is, I think, the best thing they can do ; as when they are living in tents they are continually moving short distances, thus preventing any accumulation of filth around them.

Resources and Occupations.—Stock-raising is in my opinion the greatest resource these Indians have in the future, which applies of course to those reserves only that have the necessary area of hay land. Only some of the Indians are adapted for grain-farming, as many of them are physically incapable of doing the steady hard work required on a farm. The necessary forethought to prepare land one year, for seeding during the next, is altogether contrary to their nature. I am inclined to think many of them work for the settlers much better than they do for themselves when on the reserve; a good deal of money is earned in this way, and by the sale of hay and wood in winter. The wandering portion of the different bands earn considerable at digging senega-root and picking berries, and a little is earned at hunting and fishing, cutting cord-wood, logs and rails, herding, tanning hides, bead-work, &c.

Buildings, Stock and Farming Implements.—All the houses are of logs ; there are a few good ones, but the hut predominates ; somes few have shingle roofs and nearly all have lumber floors. The rather poor quality of houses is accounted for by the scarcity of good logs, and the cost of lumber. The Indians prefer to live in tents in the summer, and I think the preference benefits their health.

The cattle at Swan Lake and Roseau reserves are increasing and doing well, and the prospects for the future in this line are very favourable. At Indian Gardens it is impossible to keep cattle on account of the absence of hay. At Long Plain there are a few head of cattle, but the Indians do not take any interest in them.

They are well supplied with implements and tools and know well how to handle them, but until they can buy their own, they will not take the care of those in their possession that they should, and family jealousy prevents them from passing on from one to another, as they are expected to do, the implements and tools supplied by the government for the benefit of the band.

Education.—There is only one school in this agency, and that is the new one built at Swan Lake. It has only been open a short time at date of writing, but the prospects are most encouraging, and I think there will be no trouble after this in getting the members of this band to send all their children to school, although previous to this they were strongly opposed to education. The first request of the kind was also made by the Indians of Roseau Rapids for a school, but they qualified their request to the extent that the teacher should be undenominational. But this, in my estimation, does not detract from their request, as it is thoroughly characteristic of

that band. The Long Plain band does not take any interest in education or religious matters, and appears simply to want to be left alone.

Religion.—During the past year there has only been the Roman Catholic church at the Roseau River reserve, which has been visited periodically by the priest in charge. The school teacher at the new school at Swan Lake, will hereafter attend to spiritual matters there, under the auspices of the Presbyterian Church. The Indians of Long Plain and Indian Gardens reserves, are of the old style, and would if allowed, prefer to keep up the sun dance and other forms of pagan worship, and yet there are Indians on both these reserves who are far advanced in knowledge of the manners and customs of civilization.

Characteristics and Progress.—Indians are all full of character, and nobody understands this so well as the Indian agents, who come out 'short' in the majority of deals with them. The Indian looks upon the Shunie-okeman as fair game to be plucked at every opportunity, because in the Indians' estimation he is the man that makes the paper treaty money, and of course he can make as much as he likes. Indians when trading amongst themselves, seldom make an even trade, as the very spirit of the trade is not in what he is going to acquire, but in how much he is going 'to skin' the other fellow.

Progress is slow and uncertain, as an Indian may be doing very well, but when one of his family falls sick, he at once drops all interest in farm or stock and remains at home until the sick one is well again, or dead ; in the latter event he at once starts off on a journey and will probably not return for many months. These Indians are certainly advancing in the way of earning a living like the white man, but it is also just as certain that it would be to their advantage if they were more select in their model. It is a strange thing that adjoining almost every reserve in the country you can find some of the worst specimens of white farmers, and these are the ever present model for the Indian. He quite naturally selects the free and easy style.

Temperance and Morality.—There is considerable intemperance at all the reserves in this agency, simply on account of their proximity to railroad towns, and there is no doubt that a good deal of the Indians' cash is spent in this way, and although we can catch the Indian it seems impossible to get at the source of supply. They will stand imprisonment and fine, but will not tell where they got the liquor. At Swan Lake, I believe, there would be very little of it, were it not for the occasional visit of Indians from Turtle mountain, that always terminates in a spree. There is no doubt that if the visits to and from Turtle mountain could be stopped, one of our great sources of trouble would end.

Regarding their morals, I can only say that my attention has not been drawn to one case of immorality of the Indians in this agency during the past year. I have no doubt there is immorality when there is liquor amongst them, but it is kept secret amongst themselves.

General Remarks.—Last winter, although fairly cold, was not severe and the weather continued steady throughout the winter, which made it much more healthy for the Indians, and they passed through the cold season with but very little hardship. The Indians of Roseau River band, ran short of food towards the spring, and were allowed to sell a little wood to help them, and they were also given a small quantity extra of bacon and flour. The most disagreeable and unsatisfactory work in this agency to me, is the continual traffic in liquor amongst the Indians, as there are so many non-treaty half-breeds wandering through the country visiting their relatives on reserves and procuring whisky for them wherever they go. It seems impossible to get a conviction against them, as the Indians will pay any fine and stand any punishment before they will tell where they get the liquor.

Portage la Prairie Sioux.

This band of Indians, although not in treaty, come within the jurisdiction of this agency. They live on a small tract of land, about twenty-six acres, purchased by themselves inside the town limits. They also have lot No. 14 of the parish of Portage la Prairie, given to them as a reserve by the Dominion government, but up to the present time have not made any use of it. They are physically a fine class of Indians, big, strong, and healthy-looking. They have good houses and gardens that are well looked after. The men can get all the work they can do with the farmers in the vicinity, and the women work around the town washing, scrubbing, &c. They make a good living and are independent and self-supporting ; and if it were possible to keep liquor away from them, they would be a model Indian community. The Presbyterian Church attends to their spiritual guidance, and service is held regularly in the mission church in the village. The Sioux boarding school in the town, is doing good work. It has accommodation for forty pupils and receives a per capita grant from the government for twenty pupils. Both the principal, Miss Fraser, and Miss Baird, teacher, are highly adapted for the good work carried on there, and are much interested in the success of the institution.

MANITOWAPAH AGENCY.

There are nine reserves in this agency, of which Sandy Bay is in Treaty No. 1 ; Pine Creek, in No. 4, and the rest in No. 2.

Reserves.—*Sandy Bay* is situated on the southwest shore of Lake Manitoba, in township 18, range 9, west of the 1st meridian. It has an area of twelve thousand one hundred and sixty acres, the greater part of which is covered with scrub and bush. It is not suitable for grain-farming, although there is sufficient good land for gardens, and a fair supply of hay.

Lake Manitoba reserve is situated on the northeast shore of Lake Manitoba, in township 22, ranges 8 and 9, west of the 1st meridian. It has an area of nine thousand four hundred and seventy-two acres. It is much broken by arms of the lake, is covered with a heavy growth of brush and timber, and quite unsuited for farming. There is enough good land for gardens and a good supply of hay.

Ebb and Flow Lake reserve is situated on the west shore of Ebb and Flow lake, in townships 23 and 24, ranges 11 and 12, west of the 1st meridian. It has an area of ten thousand eight hundred and sixteen acres. It is unsuitable for farming, but has a good supply of hay and plenty of timber.

Fairford reserve is situated on the Fairford river, in townships 30 and 31, range 9, west of the 1st meridian. It has an area of eleven thousand seven hundred and twelve acres. It is well supplied with good timber and hay, has plenty of good land for gardens ; but up to the present time grain has not been grown with any degree of success.

Little Saskatchewan reserve is situated on the west shore of Lake St. Martin, in township 31, range 8, west of the 1st meridian, and has an area of three thousand two hundred acres. It is well supplied with wood and hay, but is not adapted for farming.

Lake St. Martin reserve is situated on the north end of Lake St. Martin, in township 32, ranges 7 and 8, west of the 1st meridian, and has an area of four thousand and thirty-two acres, is well wooded and not adapted for farming.

Crane River reserve is situated on the east side of Crane river, in township 29, range 13, west of the 1st meridian. It contains seven thousand nine hundred and thirty-six acres. There is a quantity of good spruce timber and sufficient good land

for gardens ; but it would be a benefit to the reserve if it had more hay land, as there is a good prospect of a large herd of cattle here.

Waterhen River reserve is situated at the south end of Waterhen lake, in township 34, range 13, west of the 1st meridian. It has an area of four thousand six hundred and eight acres. It has a good supply of timber and hay, but is unsuited to farming.

Pine Creek reserve is situated on the west shore of Lake Winnipegosis, in township 35, ranges 19 and 20, west of the 1st meridian. It has an area of nine thousand one hundred and fifty-two acres, and is well supplied with hay and timber.

Tribe.—All the Indians in this agency belong to the Ojibbewa tribe, but there are many French, English and Scotch half-breeds.

Vital Statistics.—The population of the different bands at the last annuity payments was as follows :—Sandy Bay, two hundred and sixty-four ; Lake Manitoba reserve, one hundred and two ; Ebb and Flow, sixty-nine ; Fairford, one hundred and eighty-eight ; Little Saskatchewan, one hundred and five ; Lake St. Martin, one hundred and thirty-three ; Crane river, fifty-two ; Waterhen river, one hundred and thirty-eight, and Pine Creek reserve, ninety-four, making a grand total of eleven hundred and forty-five souls.

Health and Sanitary Precautions.—The health of the Indians generally has been better than usual during the past year, and there has been no epidemic amongst them. Scrofula and consumption are ever present to a greater or lesser extent in all the bands, and we can do but little against them.

The ordinary sanitary precautions are carried out, but the Indians move into their tents the first thing in the spring, even before the snow is all gone, and as they are continually moving short distances, it avoids any possibility of disease arising from want of sanitation.

Resources and Occupations.—Grain-growing on these reserves, so far as it has been tried, has not proved successful ; but cattle-raising, although only in its infancy as yet, holds out prospects of being a large and profitable industry in the future. The lake, with its stock of fish, will no doubt always be a resort for them in time of need. In fact, the Indians on the northern reserves earn a lot of money every winter now at fishing. Nearly all of them earn more or less at hunting, trapping, digging senega-root and picking berries. Quite a number work as boatmen on the lakes, and during harvest and threshing they can all get work, but the great drawback is they will not stick to a job right through the season.

With all their resources at hand and their ability to profit by them, there is no reason why they should ever be hard up, could they only realize the necessity and provide for the rainy day.

Buildings and Stock.—All buildings are of log, many have shingle roofs, and nearly all have lumber floors, with good doors and windows. The majority have cook stoves, and a number of them have the old fireplace in addition, which acts as a splendid ventilator. At Fairford and Sandy bay, the log houses are as good as can be found in the country, and furnished with modern conveniences. The stables are of log, with poles and hay on top, and when repaired for the winter, answer the purpose admirably for what they are intended.

Thorough-bred shorthorn bulls were supplied this year to Ebb and Flow, Lake St. Martin and Lake Manitoba reserves ; but as they were only yearlings, it is hardly probable that much benefit will be derived from them for another year. The Indians take fairly good care of their stock, and no loss has occurred from neglect during the past year. As the young men grow up, I think they will take more interest in cattle than their parents.

Education.—There are day schools on all the reserves : at Fairford there are two, and at Pine Creek there is a large stone boarding school, 114 x 48 feet, three stories high and basement, conducted under the auspices of the Roman Catholic

Church, with a staff of professional teachers from the order of the reverend Franciscan Sisters. I cannot speak too highly of the work done in the school-room here, and the manner of conducting the whole institution is beyond comment. It receives a per capita grant from the government for fifty-five boarding pupils, but has about seventy children boarding in the building. The boarding school at Waterhen river has been closed and the children transferred to Pine Creek school, but a day school at Waterhen has been continued. It is very difficult, I might say almost impossible, to get a regular attendance at any of the day schools on account of the parents having to go away on hunting trips, or to get work to make their living.

Religion.—In this agency there are two Anglican churches, one at Upper Fairford, and one at Little Saskatchewan ; four Roman Catholic, namely, one each at Sandy bay, Lake Manitoba, Waterhen river and Pine Creek ; and one Baptist church at Lower Fairford. On some of the reserves where the majority of the population are half-breeds, intelligent interest is shown in religious instruction; but with the old-time Indian it is quite different, and his only interest in the missionary rests in the clothing and food he can get out of him. One denomination to each reserve, appears to give the best results, more than that only seems to raise doubts, bickering, disputes and protracted meetings, that reduce a band to poverty and nearly starvation. An example of this we had on the Fairford, Little Saskatchewan and Lake St. Martin reserves last winter.

Characteristics and Progress.—Had these Indians not the government to look to for assistance in times of need, I believe they would make a better effort towards self-support. The more assistance they get, the more they look for, and take it for granted that it is due them. Consequently, they will in some cases nearly starve before making any effort to earn anything for themselves. Had they the energy of white men, they could get work the year round; but it will take more than this generation to instil that amount of energy into their nature.

Their progress is slow, but it is there nevertheless; it may not be in acquiring stock or farming on the reserve, but in working for the settlers, railroads, saw-mills, &c., in keeping the same job the year round and expending their wages judiciously. So long as they work out, they are away from their relatives, who would live on them if they could; and away from that pernicious idea that so long as they remain on their reserve the government has to keep them in food and clothing. More money is being earned every year at haying, harvesting, threshing, &c., and this year some of the Indians have their teams and wagons working at threshing, earning three and four dollars per day. In this kind of progress one can use to advantage the slang expression 'money talks.'

Temperance and Morality.—I have heard that liquor has been on the Sandy bay and Ebb and Flow reserves, but I could not get any reliable information regarding the matter. I have not heard of any intemperance on any of the other reserves. The morals of the Indians I consider are good, and I have heard of but very few cases of immorality amongst them.

General Remarks.—When making the annuity payments at each reserve, I visited the houses, stables and gardens, and saw the live stock. At the same time we took the census of the bands for the information of the Department of Agriculture. This delayed us considerably, as the Indians do not know their ages exactly, and the children are christened a civilized name, and are known to the parents by another Indian name. To try to hurry them only caused confusion, so that it was a case of more hurry less speed.

I consider that the affairs of this agency are progressing satisfactorily.

The teachers on all the reserves have given me their hearty support in carrying on the affairs of the agency.

I have, &c.,

S. SWINFORD,
Indian Agent.

MANITOBA SUPERINTENDENCY,
PAS AGENCY,
THE PAS, SASK., July 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of the Pas agency, for the fiscal year ended June 30, 1901.

THE PAS BAND.

Reserve.—The 'Pas' is believed to have derived its name from a French pronunciation of a part of the Cree appellation, Oopaskwayow. It is situated on the Great Saskatchewan river, about one hundred and forty miles from its mouth. This reserve has one thousand one hundred and eighty acres.

Tribe and Population.—The members of the Pas band belong almost exclusively to the Swampy Cree tribe. The population consists of eighty-nine men, one hundred and eleven women, one hundred and eight boys and one hundred and nine girls, making a total of four hundred and seventeen.

Resources and Occupations.—None of the land is adapted for extensive farming operations. Only root crops are grown, and in favourable seasons large crops of potatoes are raised by the Indians. In the surrounding districts water-fowl are plentiful in summer and the lakes are well stocked with fish. Large game seems to be on the increase. It is to be regretted that during the entire summer months there is little, if any, employment to be found for these Indians. The majority would be glad to obtain work but cannot, consequently they have all they can do to hunt a living until winter sets in. Since the season of high water began the muskrats have become very numerous, and from November to May old and young employ themselves killing these animals. Over two hundred and fifty thousand rat skins were sold to the traders here last season.

Buildings.—All the houses here are built of logs and most of them have thatched roofs. Quite a few new houses are being built this summer and they are all going to have shingled roofs.

Stock.—Owing to all the hay-land, and nearly all the pasture being under water for four months during the summer and fall of 1899, thirty-five of the cattle belonging to this band died; but the Indians have still upwards of one hundred head besides fourteen horses, all of which are doing well.

Education.—On the Pas reserve there are two day schools. The children attend fairly well when they are at home, but during the hunting season they are nearly all away with their parents.

Every year a number go from here to the industrial school, and it is pleasing to know that the children are getting more anxious every year to go there.

Temperance and Morality.—Although of late years a number of these Indians go to Massey and Prince Albert (places where liquor is sold), to sell their furs, yet so far they have shown no signs of wishing to indulge in intoxicants, and there has not been one known case of intoxication in this band since my taking charge.

As a rule this band will compare favourably with the same number of white people in morality.

Shoal Lake Band.

Reserve.—Some eight miles up the Carrot river, at the foot of the Pas mountain lies Shoal Lake reserve, covering an area of two thousand one hundred and ninety acres.

Tribe and Population.—This band is chiefly an emigration from the Pas and belongs to the same tribe. There are twelve men, eleven women, twenty-three boys and fourteen girls on the reserve, making a total of sixty.

Resources and Occupations.—An abundance of fine spruce timber grows on this reserve, and where cleared the soil is good for cultivation. There is also a good tract of grazing and hay land. Salt springs abound in the neighbourhood. The Indians have no chance of getting any employment to earn wages here and have to content themselves looking after their cattle and gardens, and occasionally hunting.

Education and Religion.—The school is doing fairly well here. The children attend well, as they live on the reserve all the year round. All the members of this band have now been baptized and belong to the Church of England.

Temperance and Morality.—These Indians being so much out of the way there is no temptation here in the matter of liquor, and there are no known cases of immorality amongst them.

Red Earth Band.

Reserve.—About ten miles due west lies Red Earth reserve, also at the foot of the Pas mountain. It covers four thousand seven hundred and fifty-one acres, a large portion of which is good for cultivation. The Indians raise large crops of potatoes, which is their staple food all the year round. Large game is nearly always obtainable here.

Tribe and Population.—Most of this band are sprung from the Plain Crees; there are a few Swampies amongst them. The population here is steadily increasing and now numbers twenty-nine men, twenty-six women, thirty-five boys and thirty-four girls, making a total of one hundred and twenty-four.

Health and Occupations.—This is the healthiest lot of Indians in the agency. They lead a happy life, cultivating potatoes and hunting the moose and deer. In spring-time they make large quantities of maple sugar, but unfortunately they are entirely out of reach of a market for it.

Education and Religion.—As the majority of this band still object to changing their pagan belief, they cannot appreciate the benefits of education. The Christian portion send their children regularly to school and are progressing slowly. Those who have embraced the Christian religion belong to the English Church.

Temperance and Morality.—Strict temperance and good morals is the rule on this reserve.

Cumberland Band.

Reserve.—Returning by the Carrot river to the Saskatchewan and ascending the latter some seventy or eighty miles, Cumberland reserve is reached, situated between Pine Island lake and the Saskatchewan. The area of this reserve is one thousand two hundred and forty-two acres.

Tribe and Population.—Swampy Crees compose this band, which numbers thirty-two men, forty-eight women, forty-one boys and thirty-four girls, making a total of one hundred and fifty-five.

Health.—The general health of this band has improved.

Occupations.—Working on the Hudson's Bay Company's boats, hunting and fishing, form the chief employments of these Indians.

Education.—Owing to the scarcity of fish and game for some years, these Indians have been obliged to go long distances to obtain a living, and consequently few children were left on the reserve to go to school, and it was closed. Now, since the seasons of high water have set in, fish and game can be procured much closer to the reserve and the Indians are staying more at home. The school will be opened again this summer.

Religion.—All the members of this band belong to the Church of England.

Temperance and Morality.—I am not aware of any cases of intemperance or immorality existing here.

Moose Lake Band.

Reserve.—Some sixty miles below the Pas lies Moose Lake reserve, situated on the lake and covering three thousand five hundred and thirty-nine acres.

Tribe and Population.—Swampy Cree is the mother tongue of this band, and they number twenty-nine men, thirty-eight women, twenty-one boys and thirty-seven girls, making a total of one hundred and twenty-five.

Resources and Occupations.—There is ample grazing and hay land on this reserve, besides some arable land fit for raising root crops.

In summer these Indians spend most of their time fishing and hunting. In winter they go off to the rat swamps.

Buildings.—They take little interest in their houses, as most of the time they live in tents. There are only four or five good houses on the reserve.

Religion.—These Indians have all been Christianized and belong to the Church of England.

Education.—It is hard work to make much headway in educating the children on account of their being so much away from the reserve.

Temperance and Morality.—Intoxicants are unknown on this reserve, and I am not aware of any cases of immorality occurring during the year.

Chemawawin Band.

Reserve.—The next reserve down the river is called Chemawawin. It adjoins Cedar lake, and has an area of two thousand nine hundred and eighty-one acres.

Tribe and Population.—These Indians are all Swampy Crees and consist of thirty-two men, forty-one women, forty-eight boys and thirty-three girls, making a total of one hundred and fifty-four.

Resources and Occupations.—The land here is either rocky or swampy, except a few places where there is soil enough to grow potatoes. It is an excellent fishing and hunting ground. Fishing and duck-hunting in summer and rat-hunting in winter form the main employment.

Buildings.—Four new houses have been built here since last year, and much improvement has taken place in all their dwellings.

Religion.—There is still one pagan left in this band ; all the others are professing Christians and belong to the Church of England.

Education.—The children attend school very well and are progressing favourably.

Temperance and Morality.—I am not aware of any cases of intemperance or immorality existing here.

Grand Rapids Band.

Reserve.—The eastern terminus of this agency lies at Grand Rapids at the mouth of the Saskatchewan, where the reserve is situated, which covers an area of four thousand six hundred and fifty-one acres.

Tribe and Population.—The Indians of this band are all Swampy Crees. Twenty-two men, twenty-four women, thirty-six boys and twenty-seven girls compose the population, making a total of one hundred and nine.

Occupations.—This band has the advantage of all the others in being able to obtain work from the fish companies on Lake Winnipeg at nearly all seasons of the year. Most of them cultivate good gardens and raise fine crops of vegetables.

Buildings.—The houses here are very much improved and are the best in the agency.

Stock.—In past years the Indians have not made a success of stock-raising, but they have again made a fresh start and are promising to do better.

Religion.—This is an old-established mission and the Indians all belong to the Church of England.

Education.—The present school teacher, Mr. James Isbister, has done good work here, both as regards the school and general work on the reserve.

Temperance and Morality.—Although at times they have temptations here in the way of getting intoxicants, yet I have not known of any cases of drunkenness amongst the band so far. In morals they compare favourably with most other communities.

I am, &c.,

JOSEPH COURTNEY,
Indian Agent.

Manitoba Superintendency,
Lake Manitoba Inspectorate,
Portage la Prairie, September 16, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to present my fourth annual report upon Indian affairs in this inspectorate during the fiscal year ended June 30, 1901, and to the date above mentioned in the present fiscal term.

This inspectorate includes three agencies, namely : Portage la Prairie, Manitowapah, and the Pas. The two first are situated within the province of Manitoba, and the last in the district of Saskatchewan, N.W.T.

PORTAGE LA PRAIRIE AGENCY.

Mr. Sidney Swinford is agent ; Mr. Malcolm Campbell, farm instructor, Swan lake band ; Mr. John C. Ginn, farm instructor, Roseau bands ; Mr. Pierre Contois, interpreter, at this office.

The reserves of this agency are all so situated that we are in close touch with them by rail and mail. The Indians are of the Ojibbewa tribe, mostly with a strain of white blood.

There are three reserves in the agency, namely : Long Plain, population, one hundred and twenty-one ; Swan lake (or Yellow Quill's band) population, ninety-five ; and Roseau River bands, with a population of two hundred and twenty-one. To these figures may be added a few absentees.

The first-named reserve is situated on the north side of the Assiniboine river, about fifteen miles southwest of Portage la Prairie. The reserve is nearly all wooded with fine timber, poplar, elm, birch and oak. There are also a good number of hay meadows scattered here and there over the reserve. In the valley of the river the soil is very productive; on the higher lands it is sandy, and will not stand much cropping. About one hundred and fifty acres of land have been brought under cultivation. Owing to the poor results from farming operations last year, caused by drought in the beginning of the season and excessive rains in the fall, the Indians would not put in a crop last spring ; a few of them have small patches of potatoes and corn.

Resources and Occupations.—Owing to the proximity of the reserve to the wheat fields of the Portage plains, the Indians of this band, during the summer season, can always obtain work, and prefer this mode of life in preference to farming for themselves, and as a matter of fact they make more money. In the w nter they make a considerable sum from the sale of dry wood, and by chopping for the neighbouring farmers. This fall all the able-bodied men are earning good wages in the harvest fields.

These Indians are a contented lot, generally well clothed, and make but few appeals for assistance.

In spite of our most watchful attention, they succeed in obtaining liquor ; fines and imprisonment have but little effect.

Religion and Education.—These Indians are all pagans, and are utterly opposed to religious or educational training.

They are decreasing rapidly in numbers, and unless a radical change takes place, they will soon become extinct. This condition will apply with equal force to all the bands of this agency.

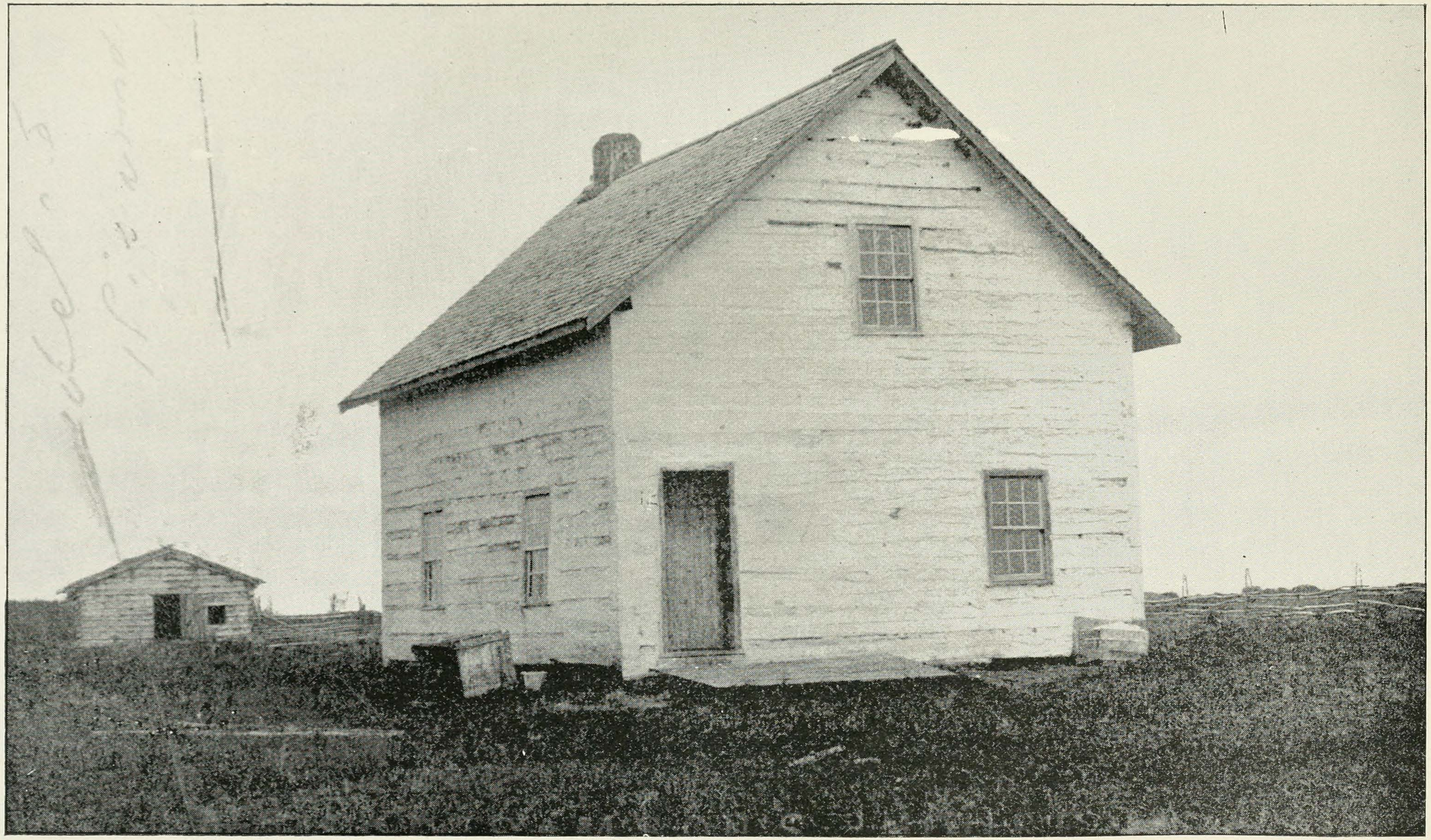
In going among them one cannot help noticing the small number of children, and young men and women, particularly the latter. This state of affairs can only be accounted for by the lack of attention given by parents to young children ; the great mortality is among children under two years of age.

Swan Lake (Yellow Quill's) Band.

The reserve of this band is situated on the Canadian Northern railway (Morris and Brandon branch). The railway runs diagonally through the reserve, and the company has placed a siding about the centre, which is a great convenience to the band. The reserve is located in township 5, range 11, west, with an auxiliary known as Indian Gardens, situated and being section 11, township 9, range 9, west. The principal reserve is beautifully situated on the north side of Swan lake, a lovely sheet of water about five miles in length, by one mile in width. The land is mostly high rolling prairie, interspersed with poplar bluffs. There is a large hay meadow on the margin of the lake, sufficient for all the requirements of the band The soil is good, and well adapted for mixed farming. The auxiliary reserve is situated on the south bank of the Assiniboine river, and is a first-class section of grain land, and would be classed among the most valuable of our provincial farming lands. The old chief, Yellow Quill, resides here with his family, and a few of his old-time followers.

Cattle.—This band has a nice herd of cattle, which are well taken care of, and the Indians take considerable pride in them.

Crops.—About two hundred acres of land is under cultivation at the principal reserve, and one hundred and fifty at the Indian Gardens. Last year the crops were a



PRESENT HOUSE OF CHIEF SAMSON, HOBBEMA, AGENCY, N.W.

failure, owing to the cause stated; this year the crops on both reserves are excellent, and the Indians are delighted with the outlook ; the threshing is not yet completed, so I am unable to give the result.

Education.—These Indians are all pagans, but are inclined to be progressive; a school building was erected last spring, and school opened in July with a fair attendance. This is the first attempt at education in this band, and the result will be watched with considerable interest. Mr. Kemper Garrioch is teacher and missionary. He is a native of the country, and speaks the Indian language fluently.

Buildings.—The Indian dwellings as a rule are poor, but I am pleased to report that a number of better houses are under construction.

To sum up, I am encouraged to think that the Indians of this band are now in a fair way of advancement, and their progress will be an example for the other bands in the agency.

Roseau Bands.

The principal reserve of these bands is situated at the confluence of the Red and Roseau rivers. There is an auxiliary to this reserve situated about eleven miles up the Roseau river from the principal reserve. The principal reserve is well adapted for mixed farming. On the banks of the river there is plenty of wood for fuel purposes. The soil is a heavy, rich, black loam, free of stones, and easy to cultivate. The close proximity of the reserve to two railways, one two miles west of the reserve, and the other the same distance east, gives the Indians a handy market for their produce. The smaller reserve at the rapids of the Roseau is more isolated. It is very choice grain land, and I am pleased to report that the Indians living here are making fair progress. They are surrounded by first-class thrifty Ontario farmers, and their influence is seen in the work of the Indians. Both bands have nice herds of cattle, and take considerable interest in them. Farming operations last year were almost a failure. This year the crops are good, especially on new land ; the old fields are badly overrun with noxious weeds. Considerable quantities of hay, sufficient for all requirements, have been cut and stacked. About three-fifths of the Indians reside on the main reserve.

I cannot report much progress by these ; they are rather a turbulent people, and difficult to advise ; they are too close to several points where liquor can be obtained ; their environment is not conducive to progress. Those of them who are willing to work can generally find employment in the vicinity, and none of them need be in distress if they exert themselves.

Religion.—About one-third of the bands are professed Roman Catholics, and the rest pagans. The Roman Catholics have a church on the main reserve.

I visit the reserves of this agency frequently.

MANITOWAPAH AGENCY.

Mr. S. Swinford, agent.

In this agency there are nine reserves, the Indians of which all belong to the Ojibbewa tribe. Three of the reserves are situated on Lake Manitoba, one on Ebb and Flow lake, one on Fairford river, two on Lake St. Martin, one on Waterhen lake, and one on Lake Winnipegosis.

Population.—The population of this agency at the last annuity payments was one thousand one hundred and fifty-one, an increase of forty-nine over the previous year.

Occupations.—The principal occupations of all the bands are fishing and hunting, largely the former.

Cattle.—They all have nice herds of cattle, and quite a number of horses. The Indians of the Fairford band are the most progressive in this respect ; they have about four hundred head of cattle, and now begin to realize the benefit of stock-raising. None of the reserves are adapted for grain-raising, the soil on all of them is low, and most of them are very stony ; still the Indians manage to grow good crops of potatoes, and other vegetables. Good hay meadows are to be found on all the reserves, but, owing to the high water in the lakes the last few years, some difficulty has been experienced at some reserves to find land dry enough to cut their hay on. The canal that has recently been completed from Lake Manitoba to the Fairford river is expected to lower the lakes sufficiently to overcome this trouble in the future. There is no lack of pasture-lands for all the stock the Indians can raise. On account of the land being so low, and the large areas of willows and bush, the cattle and horses are kept in almost continual torment during the warm weather by a great variety of insect pests. This is the great drawback to successful stock-raising in this agency.

I am pleased to state that this agency is making substantial progress. True, it is not very rapid, but still quite apparent in our visits from year to year. The Indians are living in better houses, are more cleanly in their habits, better clothed, and more attention is given to sanitary regulations year by year. Chiefs and headmen are of great assistance among most of the bands in many ways ; they try conscientiously to see that the advice given is carried out. I find that great care should be taken in appointing them, as the welfare of the band is largely dependent on the kind of men filling these positions.

The Crane River, Waterhen River and Pine Creek bands have enjoyed exceptional prosperity the last two years. Whitefish are very plentiful in the adjacent waters, and the Indians have found a ready market for all they can catch. As an evidence of how they are prospering, I would say that we have not had a single application for assistance from them for the last year.

Education.—We have day schools on all the reserves, and a boarding school at Pine Creek. The former are fairly well attended, but the results are rather discouraging. The principal reason that better progress is not shown is that the children leave the school too young ; the Indian boy on the reserve thinks himself a man at twelve years of age, and his education completed, when, as a matter of fact, he is just beginning to learn a little. The girls are withdrawn at the same age, to help in the homes. I cannot see any way of improving this condition ; certainly talk and expostulation have no effect. The boarding school is a credit to its promoters, the Roman Catholic denomination. About seventy pupils are in attendance, and the work done here would, I think, surprise those who have to do with other institutions of this kind. Rev. Father Chaumont is principal, and under him is a staff of earnest, hard-working teachers and attendants who are unceasing in their endeavour to advance the welfare of the pupils. The school-building was erected two years ago, and is a substantial solid stone building, of four floors, size, 49 x 114 feet, with accommodation for one hundred pupils. Of the ten schools in the agency, five are Protestant and five Roman Catholic.

Religion.—Rather more than half of the population are Roman Catholic ; the rest, mostly Anglican, a few Baptists at Fairford and Lake St. Martin. The Anglicans have churches at Fairford and Little Saskatchewan, the Roman Catholics at Sandy bay, Lake Manitoba, Waterhen river, and Pine Creek ; the Baptists have a chapel at Lower Fairford, and contemplate building another at Lake St. Martin.

Last January I visited six of the bands of this agency, my first inspection of them in the winter season. My visit was entirely unexpected by them, and my coming unknown. I was very agreeably surprised at the way I found things. The dwellings as a rule were clean and comfortably furnished, the people warmly clothed, and no lack of eatables. I also inspected the cattle and stables. I found the former in good condition, and the latter, in most cases, clean and comfortable.

At this date, a great many of the able-bodied men of the agency are down in this vicinity working in the harvest-fields, and making good wages. Some of them have

brought down their teams, and are making as high as $4 a day. This working out among the farmers is a great education for them, and should be of considerable benefit to them hereafter. The money they are now earning will be a boon to them this coming winter, as they are buying provisions, clothing and other necessaries with the wages earned.

I am making my report of this agency much briefer than in the past, as the general condition of the various bands and reserves is, in my opinion, so favourable that I have nothing of unusual importance to bring to your attention.

PAS AGENCY.

Mr. Joseph Courtney, agent.

In this agency there are seven reserves, viz., Grand Rapids, Chemawin, Moose lake, the Pas, Shoal lake, Red Earth and Cumberland. They are all situated on the lower Saskatchewan river, or tributary waters. The population at the annuity payments of 1900, was eleven hundred and thirty-nine. There is a slight increase this year, but I cannot give the exact figures.

The Indians of this agency are Swampy Crees. Fishing and hunting are their principal occupations. The reserves, like those described in the report of the last agency, are all low, with one exception. During the last three years the river has been very high, in fact almost the entire country is under water except the stony ridges occupied as reserves ; consequently no farming operations can be carried on, and it is all the Indians can do to find small patches for their potatoes and other garden vegetables, and even some of these are flooded over. The hay meadows are all overflown with two or three feet of water, and considerable difficulty is experienced in getting hay and pasturage for the cattle. In the case of the Indians of the Pas, who have about one hundred head, they have to go forty miles from home to find a place to make their winter stock of hay ; this has a very discouraging effect on cattle-raising. The exception before noted is the Red Earth reserve, situated on the Carrot river ; here the land is higher, and not so stony ; it is the best reserve in the agency from an agricultural standpoint. This band has large fields of potatoes, which at the time of my visit promised a heavy yield.

Despite the conditions before mentioned, these Indians were never more prosperous than now. Owing to the high water the muskrats are very plentiful, and the catch of these has been very large ; some of the Indians killed as many as 5,000 last spring, and as they are worth on an average nine cents a piece, it will be seen that the Indians have made large sums of money. Besides the muskrats other fur is more abundant than formerly. Moose are also very numerous ; one Indian informed me the he killed twenty-five during the last open season. Water-fowl of different kinds are always at hand during open water. The high water has also had the effect of restocking the river and smaller lakes with choice whitefish and sturgeon, and these fish can now be caught in plenty at most of the reserves, besides any quantity of coarser fish.

I found the Indians well satisfied with their condition and perfectly contented, and I am happy to say that they are taking advantage of the good times to provide themselves with better houses and outbuildings ; an air of thrift is perceptible all round.

At the Pas reserve I counted no less than twenty-one new dwellings in course of construction, some of them are quite pretentious in size and finish.

Education.—Each band has its day school, and all of them are comfortable and well equipped. The parents are taking more interest in the training of the children, and in some cases when going away on the hunt the men left the women and children at home so that the children could remain at school. This is a new departure and it is to be hoped that they will continue it. At Cumberland the school was reopened this summer after being closed for a number of years.

Religion.—The Indians of this agency are all nominally Christians, mostly Anglicans, a few Roman Catholics. Great credit is due to the Church Missionary Society for its labours on behalf of the Indians of this agency. There are churches on each reserve, and the moral well-being of the people is closely looked after. The Rev. John Hines, of Devon mission, is in charge of this work, and owing to his indomitable perseverance, the moral condition of the various bands is high.

The agency office is located at the Pas reserve. This is the central point in the agency, and is within reasonable distance of all the other bands. I am pleased to report that Agent Courtney has the confidence of the Indians, and they entertain a high regard for him. All travelling in this agency is by water, while it is open, and by dog-train in the winter. A mail is received once a month by Prince Albert. The isolation of these bands is no doubt accountable for the good behaviour of the people.

Portage la Prairie Sioux.

This band numbers about one hundred and thirty. These Indians own twenty-six acres of land, purchased by themselves, and situated within the limits of this town. It is beautifully located on the Assiniboine river, and laid out as a village with a street running through the centre with houses on both sides. All have good gardens, and the dwellings are clean and comfortably furnished. Those of them who can work can always find employment at good wages.

Religion.—The Missionary Society of the Presbyterian Church attends to the moral welfare of the band. They have a nice frame church in the centre of the village, which is well attended.

Portage la Prairie (Sioux) Boarding School.

This school is under the principalship of Miss Annie Fraser, and has an enrolment of twenty pupils. The school building is a comfortable frame structure, well furnished throughout, with accommodation for forty pupils. It is situated in the town, and is one of our popular institutions ; visitors are much impressed with the work done.

General Remarks.

In conclusion, I am pleased to report that the health of the Indians of this inspectorate during the past year has been good, more especially in Manitowapah and the Pas agencies, there have been no epidemics of any kind. A stock of simple medicines is kept at each reserve in the above named agencies and is dispensed by the school teachers. In Portage la Prairie agency each band has a medical attendant.

There has been but one case of serious crime, that of an Indian and his daughter, of the Sandy bay band, charged with incest. I brought the case to trial and the man was convicted and given three years in the penitentiary with twenty-five lashes ; the girl was sentenced to sixteen months in the common jail. In Portage la Prairie agency considerable drinking is done and it appears impossible to stop it ; the punishment is mostly by fines, and this the Indians do not mind. We have succeeded in two or three cases in convicting parties supplying liquor ; it is almost impossible to get good evidence in these cases, however, I do not think that this crime is on the increase, and perhaps by constant attention we may reduce it.

Since July 5 last I have inspected every band and reserve in the inspectorate, accompanied by the agents. All the annuity payments were made at the time announced. I met with but few complaints or complications. The few I found have been adjusted, and at this writing all matters pertaining to the inspectorate are in a satisfactory condition, that is, so far as I am able to decide.

I have, &c.,

S. R. MARLATT,

Inspector of Indian Agencies.

MANITOBA SUPERINTENDENCY,
RAT PORTAGE INSPECTORATE,
RAT PORTAGE, ONT., July 27, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my fourth annual report, together with statistical statement of the Rat Portage and Savanne agencies and inspection of the Couchiching agency for the year ended June 30, 1901.

RAT PORTAGE AGENCY.

This agency comprises eleven bands of Indians, designated as follows :—Rat Portage, Shoal Lake Nos. 39 and 40, Northwest Angle Nos. 33, 34 and 37, Buffalo Bay, Big Island, Assabaska, Whitefish Bay and Islington.

RAT PORTAGE BAND.

Reserves.—This band has three reserves, No. 38, A, B and C. The first named is situated in Clear Water bay, Lake of the Woods ; area, eight thousand acres. 38B on Matheson's bay, near the town of Rat Portage ; area, five thousand two hundred and eighty acres ; and 38C at the Dalles, on the Winnipeg river, about ten miles north of the town of Rat Portage.

These reserves are heavily timbered with poplar, spruce, jackpine and also with a certain quantity of Norway pine. On reserves A and B, there are several veins of rich quartz bearing gold, amongst them the Sultana and the Ophir ; the remainder consisting of hay and bottom lands.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last payment was one hundred and thirty-two, consisting of thirty-two men, thirty-seven women, thirty-eight boys and twenty-five girls, and there were four births and four deaths.

Health and Sanitary Precautions.—The health of these Indians has been fairly good. No epidemic has visited them, the deaths occurring being from ordinary causes and mostly among children. Scrofula and consumption are the most prevalent diseases among these Indians. The surroundings of their houses were properly cleaned up in the spring and refuse taken away and burned.

Resources and Occupations.—Their main resources are fishing, hunting and berry-picking. A few of them secured work in the lumber camps.

Buildings.—The general structure of their dwelling-houses is poor, and they are none too comfortable, being small and in a somewhat decayed condition.

Education.—The day school on reserve No. 38C, was in operation for only a short time during the year, the teacher having resigned. This is regrettable, as he was doing good work amongst them. However, the children attending the boarding school near Rat Portage are doing fairly well.

Religion.—Thirty-two Indians of this band are members of the Church of England, twenty-five profess the Roman Catholic faith, and the remainder, seventy-five, are pagans.

Temperance and Morality.—It is regrettable to state that a great number of this band, both men and women, are addicted to the use of liquor, and during the spring and summer months their visits to town are too frequent, and they try every means to obtain intoxicants, but by constant watch over their movements they are prevented from obtaining their favourite beverage, and I must say that not nearly so many drunken Indians are seen now as formerly. The morality of some of the women, both old and young, is far from being exemplary.

Shoal Lake Bands Nos. 39 and 40.

Reserves.—The reserves laid out and surveyed for these two bands are on the west shore and northwest of Shoal lake and partly in the province of Manitoba, with an area of sixteen thousand two hundred and five acres.

These reserves are timbered with spruce, poplar and cedar. Several good mining locations have been found on them.

Tribe.—The Indians of these bands belong to the Ojibbewa tribe.

Vital Statistics.—The population at the last annuity payment was one hundred and forty-two persons, viz. : thirty men, thirty-nine women, thirty-nine boys and thirty-four girls. The number of births was seven and deaths twelve, of which four were adults.

Health and Sanitary Precautions.—The health of these Indians has been fairly good. There are a few cases of scrofula and consumption amongst them, and one of their members has been admitted into the hospital here for treatment. Quite a number of them were vaccinated last summer, and more will be attended to at the coming payments. These Indians, although prevailed upon, are slow to become clean and tidy. All sanitary measures possible were attended to this spring.

Resources.—Fishing and hunting are their principal resources. Several of them obtained work from the mining companies in the vicinity of their reserves and at the lumber camps.

Education.—There is no school on these reserves, although there are twenty-eight children of age to attend school. The Presbyterian Church has begun to erect a school building on a plot of land on Rice bay, near reserve No. 40.

Religion.—With the exception of four members of the Roman Catholic Church, all the members of these bands are pagans.

Temperance and Morality.—Several members of these bands are addicted to liquor, but the stringent measures and the successful convictions obtained last year against those who supplied liquor to them had a good effect on their behaviour. As for immorality, less complaints have been received on that score during the year.

Northwest Angle Band No. 33.

Reserves.—The following reserves have been allotted to this band:—33A, situated on Whitefish bay, and 33B, Northwest Angle. The combined area of these reserves is six thousand three hundred and ninety acres.

Tribe.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—The population at the last treaty payments was fifty-six, namely, fifteen men, sixteen women, twelve boys and thirteen girls. There were four births and five deaths.

Health and Sanitary Precautions.—The general health of the Indians of this band has been fairly good, there having been no epidemic. All sanitary measures were attended to as far as possible, and when the Indians moved into their tents in the spring they burned all rubbish that had accumulated on the premises during the winter.

Resources and Occupations.--Hunting and fishing are their main resources for a living. A little gardening is being done by a few of them.

Education.—There is no school on the reserve, and only eight children are of age to attend school.

Religion.—All the members of this band are pagans.

Characteristics and Progress.—They are an easy-going people and easy to get along with, and the majority of them prefer to live as they did in olden times.

Temperance and Morality.—They are temperate and moral, a few only of them being addicted to the use of intoxicating liquors, but at the distance they live from where intoxicants are sold, they have few opportunities of satisfying their inclination.

Northwest Angle Band No. 34.

Reserves.—The reserves allotted to this band are the following : 34, Lake of the Woods ; 34A, Whitefish bay ; 34B, first and secured parts in Shoal lake ; 34C, Northwest Angle, in Manitoba ; and 34C, Lake of the Woods. The total area of these reserves is five thousand two hundred and forty-eight acres.

Vital Statistics.—The population of this band at the last payment was nineteen, consisting of six men, nine women, one boy and three girls.

Health and Sanitary Precautions.—The health of these Indians has been good. Their dwellings are kept clean, and in a fair sanitary condition.

Resources and Occupations.—Hunting and fishing and attending to their gardens are their principal occupations.

Buildings.—Their few dwellings are fairly good, as well as their stables. Their stock is well taken care of and in good condition.

Education.—There are no children to attend school.

Religion.—All the members of this band are pagans.

Characteristics and Progress.—These Indians are more industrious than the majority of their neighbours and also more provident.

Temperance and Morality.—They are as a whole a temperate and moral band.

Northwest Angle Band No. 37.

Reserves.—This band has the following reserves allotted to it : No. 37, on Big island ; 37, on Rainy river ; 37A, on Shoal lake ; 37B, at Northwest Angle, Lake of the Woods ; 37C, Northwest Angle river, in Manitoba. The area of these reserves is nine thousand three hundred and forty-five acres.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last payment was one hundred and nine, consisting of twenty-one men, twenty-six women, twenty-two boys and forty girls. There were three births and nine deaths, including four adults.

Health and Sanitary Precautions.—The health of these Indians has been fairly good ; there have been no epidemics of any kind, only ordinary ailments common to these roaming Indians, consisting of colds, lung and scrofula troubles. Their constant roaming about from one place to another makes it difficult to have them carry out the necessary sanitary measures regarding the cleaning of their dwellings and premises.

Resources and Occupations.—Fishing and hunting are their principal resources. They have but little opportunity of earning anything outside of their reserves, with the exception of a few who get employment at the fisheries operating on the southern part of the Lake of the Woods. They do but little gardening, excepting three or four families residing on reserve No. 37, on the Rainy river.

Buildings and Stock.—Their dwellings are few and poorly built, being in the majority of cases small log houses covered with bark, which they occupy only during the winter months.

Their stock of horses and cattle almost starved to death during the past winter, their provision of hay having been mostly submerged by high water last fall, froze over. Consequently hay had to be purchased in order to save the stock. Two of them, a horse and a young cow, died from weakness.

Education.—There is no school on any of the reserves belonging to this band, and the Indians are opposed to education. The number of children of school age is thirty-one, scattered at several points.

Religion.—The members of this band are all pagans.

Characteristics and Progress.—While the great majority of these Indians are indolent and difficult to incite to labour, a few of them are in their own way industrious and able to provide themselves each year with the necessaries of life, and are slowly bettering their condition.

Temperance and Morality.—These Indians will take liquor whenever a chance for procuring it occurs, and it is only the rigorous manner in which the law is enforced that keeps them temperate. This, and the distance they live from where intoxicants are sold, gives them few opportunities to indulge their appetite.

Buffalo Bay Band.

Reserve.—The reserve of this band is located on Buffalo bay, Lake of the Woods, in the province of Manitoba. Its area is five thousand seven hundred and sixty-three acres. This reserve is well timbered with different kinds of wood, interspersed with hay meadows and swamps.

Tribe.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last payment was thirty-three, consisting of eight men, ten women, nine boys, and six girls. There was one birth and three deaths, including one adult.

Health and Sanitary Precautions.—The health of these Indians was fairly good ; their dwellings are kept clean and in a sanitary condition.

Resources and Occupations.—They make a living chiefly by fishing and hunting, a little gardening being done by some of them, also working in the lumber camps.

Education.—There is no school on the reserve and there are only two children of age to attend school.

Religion.—All the members of this band are pagans.

Characteristics and Progress.—These Indians are simple-minded and good, and as a rule provide for all their requirements, very seldom asking for assistance. The new chief is a man of good sense, who advises his followers wisely and in the right direction.

Temperance and Morality.—These Indians are on the whole a temperate and moral people.

Big Island Band.

Reserves.—This band has the following reserves allotted to it: 31A, Naougashing ; 31B, and C, Lake of the Woods ; 31D, E, and F, on Big island ; 31G, Lake of the Woods ; 31H, and part of 31G, Big island, Lake of the Woods. The area of these reserves is eight thousand seven hundred and thirty-seven acres.

Tribe.—The members of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last payment was one hundred and forty-seven, consisting of thirty-one men, thirty-six women, forty-nine boys and thirty-one girls. There were four births and six deaths, including one adult.

Health and Sanitary Precautions.—The general health of these Indians has been fairly good during the year, and they have been free from epidemics. The sanitary regulations of the department have been as far as possible carried out. The Indians are not stationary on their reserve, but always moving from camp to camp, during the summer months.

Resources and Occupations.—Hunting and fishing are the main occupations of these Indians. A number of the young men are employed in cutting wood for the lumber companies in their winter camps, earning fair wages. Their gardens have been well and properly attended to.

Buildings and Stock.—Their buildings are kept in good repair and fairly clean, and they have cared for their stock very well.

Education.—There is no school in operation on their reserves. The number of children of age to attend school is thirty-eight, scattered over the reserves. These Indians, moreover, do not seem anxious to have their children educated.

Religion.—All the Indians of this band are pagans.

Characteristics and Progress. These Indians are law-abiding, but more or less indolent, and prefer to live by hunting and fishing rather than by cultivating the soil, and so little progress has been made.

Temperance and Morality.—They are, on the whole, a temperate and moral people, but occasionally a few of them are tempted to indulge in intoxicants by unscrupulous white men working in the lumber camps.

Whitefish Bay Band.

Reserves.—This band has been allotted the following reserves : 32A, on Whitefish bay, 32B, on Yellow Girl bay ; and 32C, on Sabaskung bay ; the combined area of these reserves being ten thousand five hundred and ninety-nine acres.

Tribe.—The members of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last payment was forty-eight persons, consisting of thirteen men, thirteen women, nine boys and thirteen girls.

Health and Sanitary Precautions.—The health of these Indians has been fairly good and free from epidemics. The sanitary condition of their houses, which are only occupied during the winter months, has greatly improved, as well as their surroundings.

Resources and Occupations.—Hunting and fishing are their main resources. A little gardening is also done by them, while some of them earned fair wages in chopping wood.

Buildings.—Their dwellings show some improvements, especially those lately built, which they keep in good repair.

Education.—There is no school-house on any of their reserves, but some of the children attend the boarding school at Rat Portage.

Religion.—There are a few members of the Roman Catholic Church in this band; the others are pagans.

Characteristics and Progress.—These Indians are, on the whole, simple and easy to get along with ; having enough for the present, they have little thought for tomorrow.

Temperance and Morality.—These Indians are, on the whole, moral, but unfortunately many of them are fond of liquor.

Assabaska Band.

Reserve.—This band has the following reserves allotted to it, nine of which have been surveyed, all in Lake of the Woods, viz. : 35A, Naougashing, 35B, Obabikong, 35C, and 35D, Sabaskong bay, 35E, Little Grassy river, 35F, Sabaskong bay, 35G, Big Grassy river, 35H, Sabaskong bay, and 35J, Lake of the Woods. The combined area of these reserves is twenty-one thousand two hundred and forty-one acres. Most of these reserves are well timbered with merchantable Norway pine, and the soil of some of them is well adapted for cultivation.

Tribe.—The members of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last treaty payment was one hundred and fifty-nine, consisting of thirty-four men, forty-three women, thirty-two boys and fifty girls.

Health and Sanitary Precautions.—The health of these Indians has been fairly good, and they were exempt from any epidemics. Nearly all of them were vaccinated this spring. The sanitary condition of their villages has been well looked after, and all refuse taken away and burned.

Resources and Occupations.—Hunting and fishing are their principal occupations. A fair number of them are employed by the lumber and mining companies in cutting cord-wood, and their gardens are properly cultivated and looked after at the proper time.

Buildings and Stock.—Their dwellings are in a fair state of repair and kept clean, and some are whitewashed; also their stables.

Their horses have been well provided for and are in a fairly good condition.

Education.—The day school on reserve 35H, was reopened again in October last, but the pagan element, which is largely controlled by the chief, is still pronouncedly averse to the children attending school. There is reason to believe, however, that the spirit of opposition to the operation of the school is diminishing, and that ere long the same will die out, and therefore, some progress may be expected for the future.

Religion.—All the members of this band are pagans, and adhere to their pagan superstitions.

Characteristics and Progress.—While some of these Indians are indolent and difficult to incite to labour, the majority are fairly industrious and law-abiding, and are slowly bettering their condition.

Temperance and Morality.—The Indians of these reserves are, on the whole, temperate; a few only are given to drink. Their morality, except in a few cases, is very good.

Islington Band.

Reserves.—This band has three reserves, viz. : Islington, Swan lake and One Man reserves. The first named is situated on the Winnipeg river, the second on Swan lake, and the other on One Man lake. The combined area of these reserves is twenty-four thousand eight hundred and ninety-nine acres. The greater part is undulating and wooded with poplar, spruce and jack-pine. The ground is stony, but grain can be successfully grown. There are several large hay swamps, also timothy.

Tribe.—The members of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last treaty payments was one hundred and fifty-three, consisting of forty-six men, forty-one women, thirty-three boys and thirty-three girls.

Health and Sanitary Precautions.—There are several cases of chronic diseases among this band, otherwise the general health of these Indians has been fairly good. The dwellings are kept fairly clean, and the sanitary instructions have been carried out.

Resources and Occupations.—Apart from the cultivation of a few small gardens on each of their reserves the occupations of these Indians are hunting, fishing and picking berries, from which they derive good returns. The lakes abound with several species of good fish and the woods with moose and deer.

Buildings and Stock.—Their log dwellings are fairly well built, especially those of Simon Paisheeguonebe and Kenneth McDonald, while a number of them are white-washed with lime. Their stock of cattle is in good condition and well provided for, and receive better attention than formerly.

Education.—There is one day school in operation on Islington reserve under the auspices of the Church of England, with a fairly good attendance.

Religion.—There is a church, with a resident catechist stationed on the boundary of the reserve, where services are held every Sunday, the majority of the band are members of the Anglican faith, and they are regular in attending their church. There are also a few Roman Catholics, the remainder are pagans.

Characteristics and Progress.—While some of these Indians are indolent and difficult to incite to labour, the majority are industrious and are able, with some exceptions, to provide for themselves and families by their hunt and their work all that they require.

Temperance and Morality.—The Indians of this band come more frequently into contact with half-breeds. These people will not hesitate to purchase liquor for the Indians during their frequent visits to Rat Portage. They are, however, fairly temperate.

As to morality there has been little ground for complaint.

SAVANNE AGENCY.

This agency is composed of eight bands, as follows :—

Lac des Mille lacs Band.

Reserves.—The reserves of this band are 22 A1, on Lac des Mille Lacs, and 22 A2, on Seine river, with an area of twelve thousand two hundred and twenty-seven acres.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last treaty payments was seventy-seven, consisting of thirteen men, fifteen women, sixteen boys and thirty-three girls.

Health and Sanitary Precautions.—The health of these Indians has been fairly good, with the exception of a mild outbreak of measles ; no other contagious disease has appeared among them. Their dwellings, which they occupied only during the winter months, are kept clean and in a sanitary condition and all of the Indians have been vaccinated from time to time.

Resources and Occupations.—The resources of the Indians of this band are limited. Their only occupations are hunting and fishing.

Buildings and Stock.—Their old log buildings in several cases show improvement in their cleanliness compared with previous years, and my remarks to the Indians in this respect were not made in vain. The new houses built are cleaner and have a better appearance.

The few head of cattle in the possession of the Indians have received attention and when seen last May were in good condition.

Education.—There is no school in operation on these reserves, and the continual roaming about of these Indians has been a great detriment to the children and an obstacle to the establishment of a day school, although there are a sufficient number of them to warrant the same.

Religion.—With the exception of four Roman Catholics, the Indians of this band are pagans.

Kawawiagamok Band.

Reserve.—The reserve allotted to this band is situated on the Kawawiagamok lake. It contains an area of five thousand nine hundred and forty-eight acres, the greater part of which is heavily wooded with spruce, tamarack and pine.

Vital Statistics.—The population of this band at the last treaty payment was twenty-nine, consisting of eight men, nine women, eight boys and four girls.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Resources and Occupations.—With the exception of the chief of the band, who has a little garden planted with potatoes, these Indians do not cultivate the soil ; they depend entirely upon their hunting and fishing for their subsistence.

Religion.—All the members of this band are pagans.

Wabigoon Band.

Reserve.—The reserve of this band is situated on Little Wabigoon lake. It contains an area of twelve thousand eight hundred and seventy-two acres.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last annuity payment was ninety, consisting of fifteen men, twenty-six women, twenty-four boys and twenty-five girls.

Health and Sanitary Precautions.—The health of the Indians of this band during the past year has been fairly good. There were no serious cases of sickness nor contagious diseases. The medical officer visited the reserve during the annuity payment and again this spring and vaccinated several of the Indians. Sanitary measures were strictly observed during the spring months.

Resources and Occupations.—Fishing and hunting for home consumption and barter are the principal occupations of the Indians. Picking berries is also one of their resources. Very little gardening is done by them.

Buildings.—Their log dwellings are fairly well built, and the majority are clean and in a tidy condition, and an improvement is noticeable each year, in fact the interior of some of them compares favourably with those of some of the white people, with good furniture therein.

Education.—The day school on this reserve continues to do good work, the children, when on the reserve, attend very regularly, and some of them are making good progress in their branch of studies.

Religion.—All the Indians of this band reported themselves to me as pagans. The Church of England has a missionary stationed at Dinorwic who is supposed to visit them.

Lac Seul Band.

Reserve.—The reserve of this band is situated on the southeast shore of Lac Seul, or Lonely lake; a fragment of this band, known as 'Frenchman's Head,' is stationed about fiftteen miles south, and there is also another fragment living at Saw Bill lake, north of Ignace Station, on the Canadian Pacific railway.

The reserve proper has an area of forty-nine thousand acres.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The combined population of this band at the last treaty payment was five hundred and sixty-four, consisting of one hundred and thirty-one men, one hundred and twenty-two women, one hundred and sixty boys and one hundred and fifty-one girls.

Health and Sanitary Precautions.—The health of these Indians has been fairly good. They have, with the exception of a few cases of scrofula, suffered only from minor ailments. Their sanitary condition is still good. All sanitary measures were attended to as far as possible.

Resources and Occupations.—The main occupations of these Indians are trapping, hunting and fishing for home consumption and trade. Several of them cultivate small gardens of potatoes, turnips and onions.

Buildings and Stock.—Their dwellings are all built of logs, and are above the average, and those of Chief Akeewance and Councillor Bunting are an exception to the general rule adopted by this band, being comfortable and tidy. Their cattle are well attended to and provided for.

Education.—The several day schools on this reserve have been in operation the full term during the year, with a fair attendance, considering the repeated absence of the parents from the reserve in the pursuit of their hunt, and in consequence, the progress made is not as good as it should be. A few children from this reserve are at the St. Paul's industrial school.

Religion.—The great majority of the Indians of this band are Christians. Four hundred and forty-six are members of the Church of England, eighty-three of the Roman Catholic Church, and the rest are pagans. The Anglicans have missions stationed at Lac Seul and Frenchman's Head. The religious services at both places are fairly well attended.

Wabuskang Band.

Reserve.—The reserve of this band is situated at Wabuskang lake. It contains an area of eight thousand and forty-two acres.

Tribe.—These Indians belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last annuity payments was seventy-three, consisting of thirteen men, seventeen women, eighteen boys and twenty-five girls.

Health and Sanitary Precautions.—The general health of these Indians has been fairly good during the year, and they were exempted from any serious ailment. Their dwellings are clean and tidy, and the usual spring sanitary measures are properly carried out.

Resources and Occupations.—Hunting and fishing are their main resources; only a little gardening is being done by them, but the same is properly attended to, with fair results.

Buildings.—Their dwellings are kept in a good state of repair, well ventilated, and in several cases the plots inclosed with a good fence.

Education.—There was no day school in operation on this reserve during the year for want of a teacher.

Religion.—Thirty-three members of this band are Christians of the following denominations : twenty-six Anglicans and seven Roman Catholics; the remainder, numbering forty, are pagans.

GRASSY NARROWS BAND.

Reserve.—The reserve of this band is situated on the English river, and it has an area of ten thousand two hundred and forty-four acres.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Health and Sanitary Precautions.—The health of these Indians during the past year has been generally good ; they have suffered only from minor ailments. They have continued to improve in cleanliness, and their dwellings also have a neater appearance, and they have paid better attention to the department's orders respecting the cleaning up of all rubbish and filth that accumulate during the winter, and having the same destroyed by fire.

Resources and Occupations.—Hunting, fishing and picking berries are the main occupations of these Indians. Their trapping has been very profitable this year, and their gardens of potatoes and other roots received better attention than formerly.

Education.—There is no school in operation on this reserve, the same having been closed for several years.

Religion.—Seventy members of this band are Christians, sixty-two being Roman Catholics, eight being members of the Church of England. The remainder are pagans.

EAGLE LAKE BAND.

Reserve.—The reserve of this band is situated on the east side of Eagle lake, and contains an area of eight thousand eight hundred and eighty-two acres.

There is much good merchantable timber on this reserve, and its soil is fairly good for cultivation.

Tribe.—The Indians of this band belong to the Ojibbewa tribe.

Vital Statistics.—The population of this band at the last treaty payments was sixty-four souls, consisting of twenty men, fifteen women, eighteen boys and eleven girls.

Health and Sanitary Precautions.—The general health of this band has been fairly good. There was no serious sickness during the year, with the exception of one case which was attended by the medical officer as soon as called upon by a message. Sanitary precautions were well attended to this spring.

Resources and Occupations.—Trapping, fishing and berry-picking were the chief occupations ; a number of the Indians were also employed in the lumber camps in the vicinity. Their gardens were well attended to with good results.

Buildings and Stock.—Their dwellings in most cases are kept in good repair, and are clean and tidy.

Their small stock of cattle were well provided for and are therefore in good condition.

Education.—The day school located on this reserve and conducted under the auspices of the Church of England, does fairly good work, notwithstanding the difficulty of keeping up the attendance, in consequence of the absence of the parents from the reserve.

Religion.—With the exception of five Roman Catholics, the Indians of this band are pagans.

GENERAL REMARKS.

Characteristics and Progress.—Under this heading the same remarks might apply to the several bands above referred to. Some bands to a certain extent have shown a

tendency to improvements, and considering their mode of living, compare favourably with Indians occupying reserves more suitable for cultivation, but it requires constant supervision, otherwise they would soon fall back into their former indolent habits. They are, however, beginning to see the benefit they derive from their industry, and there is less difficulty in making them understand than formerly that such is the case, several of the them also inducing their children to perform manual labour.

Temperance and Morality.—As several bands in this agency are situated near small towns or villages, it is rather difficult to restrain them from procuring liquor, of which some of them are passionately fond, and procuring it in the majority of cases through unscrupulous half-breeds and others, but those Indians away in the inland are generally temperate.

As to morality, I may say that there have been but few cases brought to my notice.

COUCHICHING AGENCY.

The inspection of this agency commenced on July 16 last, and the following are the names of the reserves inspected, viz. : Hungry Hall Nos. 1 and 2 ; Long Sault Nos. 1 and 2; Manitou Rapids Nos. 1 and 2; Little Forks, Couchiching, Stangecoming, Niacatchewenin, Nickickonsemenecanning, Riviere La Seine and Lac la Croix. I was also present at the payment of annuities made by the then Indian agent, Mr. Begg, to the several bands of said agency.

Tribe.—All the Indians of the Couchiching agency belong to the Ojibbewa tribe.

Hungry Hall Bands Nos. 1 and 2.

Reserves.—The reserves allotted to these bands are situated near the entrance to the Rainy river, on the north side of it. The area of these two reserves is six thousand two hundred and eighty-three acres. Reserve No. 15M, known as 'Wild Lands' reserve, adjoins them on the east. Its area is twenty thousand six hundred and seventy-one acres.

These reserves are well covered with merchantable timber. The land is admirably adapted for grain-growing, with some extensive and excellent grazing meadows.

Vital Statistics.—The combined population of these two bands at the last treaty payment was fifty-two, consisting of fifteen men, nineteen women, fourteen boys and four girls.

Resources and Occupations.—Hunting and fishing are the chief occupations of these Indians; some of them get work in the saw-mill near their reserve; also at the fisheries. The most industrious cut ties during last winter, which they disposed of to the lumber companies at a fair profit. This, together with their root crops, enable them to have an abundant supply of food and clothing while these industries last.

Education.—There is no school in operation on these reserves.

Religion.—The great majority of these Indians are pagans, with a few members of the Church of England.

Long Sault Bands Nos. 1 and 2.

Reserves.—The reserves of these bands are situated on the north bank of Rainy river, opposite the rapids of that name, and are designated as Nos. 12 and 13. Their combined area is eleven thousand four hundred and thirteen acres. These reserves are also well timbered with spruce, cedar and poplar.

Vital Statistics.—The population of these two bands at the last treaty payment was eighty-three, consisting of nineteen men, thirty-one women, thirteen boys and twenty girls.

Resources and Occupations.—The Indians of these bands did a thriving business at fishing for sturgeon this spring. This, together with the cutting of ties and the sale of the right of way through their reserves for the Canadian Northern railway, has enabled them to have an abundant supply of food and clothing while these industries last. Their potato gardens were never more promising than they are at present.

Education.—The day school under the auspices of the Church of England has improved since last year, and the teacher is doing her best to bring the puplis along. The attendance is still somewhat irregular on the part of the children whose parents roam about from the reserve to the Lake of the Woods. A few children from these reserves are pupils of the St. Paul's industrial school.

Religion.—The Church Missionary Society has a chapel with a resident missionary and a small number of adherents, but the great majority of these Indians are pagans and adhere to their old superstitions.

Manitou Rapids Bands Nos. 1 and 2.

Reserve.—The reserve of these Indians is situated on the north bank of the Rainy river, opposite the rapids of that name, and is designated as No. 11. The area is five thousand seven hundred and thirty-six acres.

Vital Statistics.—The combined population of these bands at the last treaty payment was one hundred and nineteen, consisting of twenty-five men, twenty-eight women, forty-four boys and twenty-two girls.

Resources and Occupations.—This reserve is well adapted for mixed farming, with splendid pastures and fine hay marshes on the low lands. Their gardens and fields of oats promise good returns. The cutting of ties and the clearing of right of way through the reserve for the Canadian Northern railway enables them to have an abundant supply of food and clothing and a large amount of cash this winter.

Buildings.—Their dwellings are kept in good repair, clean, and some of them have good furniture therein.

Education.—There is a day school on this reserve under the auspices of the Church of England, but in consequence of the Indians' repeated absence from the reserve the attendance is irregular; moreover, they are very bigoted about their old customs, and manifest little interest in education.

Religion.—The Indians of this band are all pagans.

Little Forks Band.

Reserve.—The reserve of this band is situated on the north bank of the Rainy river, twelve miles east of Fort Frances, and is designated as No. 10. It contains an area of one thousand nine hundred and twenty acres.

Vital Statistics.—The population of this band at the last treaty payment was forty-six, consisting of eleven men, fifteen women, ten boys and ten girls.

Resources and Occupations.—This reserve on its front on the river, contains a good proportion of farming land. There is also a large quantity of dry timber suitable for fire-wood, and extensive hay swamps. These Indians have many occupations open to them : hunting, fishing and working for farmers. Several of them made ties and worked on the right of way for the Canadian Northern railway.

Buildings.—Their dwellings, although small, are in fairly good condition and clean.



Cadet Corps, "Volley Firing," St. Paul's Indian Industrial School (near Winnipeg), October 10, 1900.

Education.—There is a day school in operation on this reserve, under the auspices of the Church of England, but the attendance is very irregular.

Religion.—There is only one Christian family in this band ; all the other members are pagans.

Couchiching Band.

Reserves.—The reserves of this band are situated on Rainy lake, a few miles east of Fort Frances, and are designated as 16A and 16D, with an area of eleven thousand three hundred and sixty acres.

Vital Statistics.—The population of this band at the last treaty payment was one hundred and forty, consisting of thirty-one men, forty-three women, thirty-three boys and thirty-three girls.

Resources and Occupations.—The members of this band do little grain-raising, depending more upon their income derived from each annuity, hunting, fishing and working for lumber camps, and at various occupations. The clearing of the right of way and cutting ties for the Canadian Northern railway through their reserve enabled them to have an abundant supply of food and clothing last winter and this spring.

Buildings.—Their dwelling-houses are of a very fair order, mostly whitewashed, and kept in a very neat condition and well furnished. Their ponies and cattle are well sheltered and provided with sufficient hay and grain. Stables are kept fairly clean.

Education.—The day school during the winter months was fairly well attended, and the children are making fair progress in their studies.

Religion.—The great majority of this band are Roman Catholics, with two members of the Church of England, and the remainder pagans. The Roman Catholics have the walls for a church finished, with the necessary lumber on the ground for its completion.

Stangecoming Band.

Reserve.—The reserve of this band is situated on Rainy lake, about eight miles east of Fort Frances.

Vital Statistics.—The population of this band at the last treaty payment was fifty-two, consisting of eight men, nine women, thirteen boys and twenty-two girls.

Resources and Occupations.—The Indians of this band live mainly by hunting and fishing. Most of the land on the reserve is stony, consequently very little gardening is done. Their fishing ground is at a distance from the reserve. They have but little chance of earning anything outside of their reserve ; however, a few of the young men engage from time to time with the lumber camps.

Education.—There was no school in operation during the past year.

Religion.—Four members of this band are Roman Catholics. The remainder are pagans.

Niacatchewenin Band.

Reserve.—The reserves allotted to these Indians are 17A, 17B, 18B, and 18C. The portion upon which they reside is situated on Northwest bay, Rainy lake. The area of the above reserve is fourteen thousand five hundred acres.

Vital Statistics.—The population of this band at the last treaty payment was fifty-four, consisting of ten men, thirteen women, twelve boys and nineteen girls.

Resources and Occupations.—The main occupations of these Indians are hunting, trapping and fishing. They have also small gardens of potatoes and corn. Several of the male members obtained employment in the lumber camps by cutting and driving logs at good wages.

Education.—There is no school on this reserve.

Religion.—All the Indians of this band are pagans.

Nickickonsemenecanning Band.

Reserves.—The reserves allotted to this band are designated as 26A, 26B, and 26C. The reserve on which the Indians reside is situated on Porter inlet, Red Gut bay, Rainy lake. The combined area of their reserves is ten thousand two hundred and twenty-seven acres, and there is good timber in some portions of them.

Vital Statistics.—The population of this band at the last treaty payment was fifty-nine, consisting of twelve men, seventeen women, seventeen boys and thirteen girls.

Resources and Occupations.—Apart from the cultivation of a few small gardens of potatoes and corn, their main occupations are trapping, hunting and fishing. Some of them, however, get work in the lumber camps and also with mining companies at good wages.

Education.—There is no school established on the reserve.

Religion.—Only two members of this band are Roman Catholics ; the remainder are pagans.

Riviere la Seine Band.

Reserve.—The reserves allotted to this band are situated, one at the entrance of the Seine river and the other on Wild Potato lake, and are designated as Nos. 23A and 23B. The majority of the Indians of this band occupy the former and the others reside near Sturgeon Falls, on the latter. The area of these reserves is eleven thousand and sixty-three acres.

Vital Statistics.—The population of this band at the last treaty payment was one hundred and twenty-six, consisting of twenty-seven men, thirty-two women, thirty-one boys and thirty-six girls.

Resources and Occupations.—Those Indians living on the reserve near the mouth of the river, and a few residing at Sturgeon Falls, cultivate small gardens of potatoes and corn, but their main resources consist in hunting, trapping and fishing. The mines in operation in the vicinity of these reserves having been closed during the year, none of the Indians were employed as formerly.

Education.—There is no school in operation on the reserve.

Religion.—All the members of this band are pagans.

Lac la Croix Band.

Reserve.—The reserve for this band is situated on Neguaquon lake, and is designated as No. 25D. It contains an area of fifteen thousand three hundred and fifty-five acres.

Vital Statistics.—The population of this band at the last treaty payment was ninety-one, consisting of fourteen men, twenty-one women, nineteen boys and thirty-seven girls.

Resources and Occupations.—The main resources of these Indians are hunting, trapping and fishing. Their gardens of potatoes, corn and other roots are well attended to and properly hoed. They have but little chance to earn anything outside of their reserve.

Education.—There is no school in operation on the reserve.

Religion.—There are ten members of the Catholic Church in this band; the remainder are pagans.

General Remarks.

Condition and Progress.—There is a marked improvement in the circumstances of the several bands whose reserves are on the Rainy river, and the Couchiching band, since my last report. The advent of the new railway in that part of the district, gave them a chance to earn good wages in cutting ties and clearing the right of way; this together with the fishing for sturgeon enables them to have an abundant supply of food and clothing. Among the more prosperous the most noteworthy is Councillor Red Hawk of Manitou Band No. 1. This is a man of more than average capacity, so that he not only worked at his large garden and small farm, but undertook a contract for cutting ties, with the result of several hundred dollars at his credit. His house is of a medium size, consisting of but one room, but it is properly furnished and well kept; but the same remark cannot be applied to a great number of the Indians and the other band of this agency; much remains to be done, so little satisfies an Indian's ambition, if these Indians can be said to have any ambition beyond keeping their stomachs full.

Temperance and Morality.—The bands stationed away from civilization and temptation are temperate, but I am sorry to say that those living near the international boundary are not a temperate people, and with the facility afforded them to procure liquor across the line, any time they have money to pay for it, this condition of affairs is most deplorable. Crime and wrong-doing of a serious nature have not been known during the past year among the Indians of this agency. The only noteworthy evil is conjugal irregularities.

The agency headquarter buildings and surroundings have been greatly improved: a new wire fence has been made, inclosing buildings and gardens. The government property is carefully stored.

Agency Books.—The various records were examined and found to be kept with great care, accuracy and neatness. The correspondence is kept on the file system, and the letter register is regularly written up.

The agent, Mr. Wright, took charge of this agency in September last, and has since been constantly moving, visiting several reserves in order to acquaint himself with the condition of the Indians of this agency, and he spared himself no exertion with that object in view. It is therefore hoped that with his long experience and skill the change will prove to be profitable to the department and the Indians of this agency.

I have, &c.,

L. J. ARTHUR LEVEQUE,
Inspector of Indian Agencies.

NORTHWEST TERRITORIES,
ASSINIBOIA—ASSINIBOINE AGENCY,
SINTALUTA, August 2, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901, along with a statistical statement and inventory of government property under my charge.

ASSINIBOINE BAND, No. 76.

Reserve.—The reserve is a block of land nine miles by eight, situated about seven miles south of the flourishing village of Sintaluta, a station on the main line of the Canadian Pacific railway.

Vital Statistics.—The population is two hundred and eleven, being an increase of three since last year. During the year there were eight deaths and eleven births.

Health and Sanitary Condition.—On the whole, during the past year the health of the Indians on the reserve has been good. The deaths have been due mostly to old age, pneumonia and cholera infantum.

Dr. Boujou, who lives at Sintaluta, visits the reserve whenever required.

Resources and Occupations.—Hay and wood are the only natural resources of the reserve ; and the supply of a marketable quality of dry wood being about at an end, this source of revenue may be counted almost as extinct as the buffalo. The reserve is plentifully supplied with a healthy young growth of poplar, which if given time, and if prairie fires can be kept out, will soon grow to a size to be useful. At present the Indians do not cut the green wood except an occasional small quantity for some special purpose for their own use.

The Indians make a considerable quantity of hay and, after securing enough for their own cattle, sell the surplus to the settlers and in the towns on the Canadian Pacific railway adjacent.

They also raise wheat, oats, potatoes and other vegetables for their own use and also for sale. They also rear cattle. The past year was probably the worst on record for farming operations. A continual drought to the end of July put it past most of the crops to recover. When the rain came, which it did in torrents, in August, it was generally accompanied by destructive hail, which knocked down everything. The heavy rains lasted almost till the beginning of winter and it was with the greatest difficulty that enough hay could be got up to winter the cattle, and it was on the whole of an inferior quality.

Some of the more ambitious Indians, recognizing the fact that the supply of dry wood is not to be relied upon any longer, have begun to burn lime for sale and use. Charles Rider and Medicine Rope, burnt a kiln this spring. Considering that it was the first attempt, they turned out a very creditable article. They are thinking of burning more, and other Indians are thinking of copying their example.

Buildings.—The Indians continue to improve their buildings. Some of them have good roomy houses with shingled roofs. In the past these buildings have been plastered with common mud, which, during the beating rains, generally falls out and presents a dirty appearance and requires periodical renewing. I notice those who have

been burning lime have put a quantity on one side for their own use to plaster their houses instead of mud, so that in a short time I hope to see mortar plastering totally supersede the old-fashioned mud-work.

Stock.—The stock continue to do well, although the last winter was hard on them on account of the poor quality of hay that could be put up. Some of the white settlers lost heavily, but I am glad to say that our cattle came through with a very slight loss in comparison, although it was a very anxious time, as the winter held on so long and in fact when the winter proper was over, several tremendous falls of snow at intervals made it difficult for the cattle to get feed outside and many had to be taken up again.

Characteristics and Progress.—I am glad to be able to say that I think the Indians of this band are making good progress towards civilization.

A number of the younger men, including Headmen Chas. Rider and Eahsichan, have adopted civilized attire altogether, even to cutting their hair ; not only is this a good showing for themselves, but it makes it a great deal easier for graduates of the schools returning to live on the reserve to retain the cleanly habits they have been taught to adopt when at school, and very much lessens the chance of their returning to Indian ways.

Temperance and Morality.—I have had no trouble with liquor in connection with the band during the past year. I think the Indians are getting less and less in the habit of hanging around the towns ; which was their opportunity for getting liquor.

With regard to their morality, I think they will compare favourably with any other class of people of the same number.

General Remarks.—The year just closed has perhaps from a financial standpoint been the worst that could be experienced. Between failure and destruction of crops by drought and hail respectively and difficulty of saving hay from the wet weather which came too late to be of any good to the crops but spoiled hundreds of tons of hay, and also the scarcity of saleable dry wood, to which I may add the total absence of work in the fall from the settlers, and owing to a failure of their crops, the Indians had practically nothing to commence the winter with. The state of affairs caused me considerable anxiety and I had several times to take the responsibility on myself of helping them along or witness suffering or loss.

Considerable work has been done around buildings and fencing about the agency headquarters during the year. With regard to the latter, I may say, this year witnessed the finish of converting the old fencing of poles, which were rotten and useless, into all wire fencing. The total length of such fencing—measured—is three miles. This does not include the cattle inclosure made last year, which would make four and a half miles in all.

I am pleased to be able to say that, notwithstanding the discouraging features of last season, this year the Indians have done a great amount of summer fallowing. I have not measured it yet, but I have no hesitation in saying that is by far the largest amount I have ever seen done in one season by them. Some new breaking has been done and more is in progress.

Daniel Kennedy, who assists me here and also acts as interpreter, does his work well and takes an interest in it.

I am glad to state that a good crop was put in by the Indians and at the present time the prospects look very bright for a good harvest.

Sioux Band, Moosejaw.

These Indians came over from the United States at the time of the hostilities with the American government.

In the year 1876 they were attacked by General Custer with about four hundred of the 7th United States cavalry on the Little Big Horn river, Montana. The collision

resulted in the total annihilation of the soldiers, not one escaping. The fight occurred in daylight in the month of June against an enemy without artillery, but mobile and with a thorough knowledge of the country.

Many of the Sioux (numbering at one time about six thousand Indians) came to this side, and made their hunting-grounds around Wood mountain and Cypress hills for some years, where they were effectually controlled by a handful of the Northwest Mounted Police.

Many returned in time to their agencies in the States, and the remainder, about the time of the disappearance of the buffalo, and contemporaneously with the building of the Canadian Pacific railway, moved across to the town of Moosejaw, and have made a living ever since working for settlers, selling bead-work, &c.

They number about one hundred and twenty-five and their life around the town tends a good deal to lead them to bad habits.

Temperance.—They get liquor without much trouble, and although a white man and an Indian were convicted lately for supplying it, which will tend to check it, I fear from their close proximity to town that they will still get some.

Health.—At one time they were very healthy, but of late years tuberculosis in one form or another has become very prevalent.

Characteristics and Progress.—While some of these Indians earn considerable money by working around, they are making no permanent progress, and live in tents both winter and summer.

I have, &c.,

THOS. W. ASPDIN,
Indian Agent.

NORTHWEST TERRITORIES,
BATTLEFORD AGENCY,
BATTLEFORD, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report on the affairs of the Battleford agency for the past fiscal year.

This agency comprises seven reserves situated at distances varying from fourteen to forty miles from the town of Battleford, the buildings of the agency headquarters being conveniently located on the Battle river, at a central point two miles south of the town.

RED PHEASANT'S BAND.

Reserve.—This reserve consists of twenty-four thousand three hundred and twenty acres, and is located twenty-two miles southeast from Battleford, in the Eagle hills.

Tribe and Population.—The inhabitants of this reserve are Cree Indians. They number thirty-nine men, forty-one women, and seventy-two children, in all one hundred and fifty-two souls.

Resources and Occupations.—The reserve is well adapted for mixed farming: the soil is fertile, water is abundant, and hay is to be had in moderate quantities. The extent and character of farming operations have been improving, but slowly.

Last season's wheat crop was a partial failure. Oats and barley, however, gave good returns.

Stock.—The cattle wintered but poorly owing to scarcity of hay, but there was no loss from this cause.

Farming Implements.—A few of these Indians have a full equipment of implements for farming on a small scale, though for the most part they are still obliged to work in groups in order that all many avail themselves of the use of the limited number of wagons, mowers, and other expensive implements. They handle their implements with considerable care.

Education.—More than usual interest is taken in the day school here, and a fair attendance is maintained. Several children from this reserve are at the industrial school.

Religion.—These Indians belong chiefly to the Church of England, the remainder being Roman Catholics. There is a mission church on the reserve, and regular services, the Rev. Mr. Inkster being in charge.

Characteristics and Progress.—This was formerly the foremost band in this agency in respect to civilization and material prosperity, and it still retains that rank in some particulars, inasmuch as its members approach more nearly the standard of the white man in intelligence ; but in industrial progress, and in the fact as well as the spirit of independence they have relatively lost ground during the past year.

Sweet Grass Band.

Reserve.—This reserve has an area of forty-two thousand five hundred and twenty-eight acres, and is located on the south side of the Battle river, twenty miles west of Battleford.

Tribe and Population.—The population comprises ninety-seven Cree Indians, namely, twenty-three men, thirty-five women, and thirty-nine children. This was formerly a numerous band proportionate to the liberal area of the reserve, but through desertions and deaths it has been reduced to its present small numbers, among whom there still remain a score of aged and sickly persons, whose demise is likely for a time to offset the increase.

Resources and Occupations.—Like the other reserves of this agency, this reserve is adapted for grain-growing and the feeding of a limited number of stock. Being separated by a considerable distance from the other reserves, this band is the sole charge of one farming instructor. The consequence is that the work is supervised in every detail, and during the past year has been attended with much success. The wheat crop of last season averaged somewhat over thirty bushels to the acre, and the grain was clean and of a fair sample. There was a fair return of garden produce. The cattle were well wintered, and in consequence were in beef condition early in the summer.

Farming Implements.—During the year these Indians have purchased five combined ploughs, two mowers and two wagons. Their equipment of implements is thus rendered fairly complete.

Education.—The day school, which was but poorly attended, has been closed, and some of the pupils have been placed in the Thunderchild's boarding school.

Religion.—There are no missionaries on this reserve, nor any regular services. With the exception of a few who are pagans, these Indians belong either to the Church of England or to the Roman Catholic Church.

Characteristics and Progress.—There has been a distinct advance on the part of 50 per cent of this band toward a condition of independence and self-support, and there is evidence of an ambition for further improvement. All the working men of

the band raised their own flour this year for the first time, and several had fifty bushels, and some even as high as two hundred bushels, for sale. During the present summer a large acreage of new land was broken up preparatory to next season's work.

Poundmaker's and Little Pine's Bands.

Reserves.—These two bands, which in their condition and management have very much in common, are located about thirty-five miles west of Battleford, on both sides of the Battle river, and nearly opposite the settlement of Bresaylor. They contain thirty-five thousand two hundred acres. The Eagle hills, which here rise to a height of about four hundred feet, cross the reserves at a distance of a mile from the river and parallel with it. The highest point is the Spy hill, famous in Indian legend. The hills are here intersected by the Cutknife creek and several deep lateral ravines, affording picturesque scenery and fine shelter, water and grazing for all kinds of stock.

Tribe and Population.—These Indians also belong to the Cree nation, and number fifty-seven men, fifty-four women and ninety-six children ; two hundred and seven in all.

Resources and Occupations.—The facilities for grain-growing are here of the highest class. The industry has accordingly been much extended, so that this year there has been a considerable surplus of wheat, for much of which, however, there was no sale, owing to the limited demand and the inferior quality of the grain. Gardening shows a steady improvement and is attended with much success. The Indians increase their income slightly by the sale of lime and charcoal. They are too far from market to haul wood or hay profitably.

Stock.—The cattle are doing well, and show a fair increase, notwithstanding the loss of about twenty-head by drowning. The winter's hay supply was amply sufficient, but the greater part of it was put up outside the reserves.

Farming Implements.—The change from the community to the individual system of work in connection with the industries, which has been partially effected, has necessitated an increase in the equipment of agricultural implements. The original stock of ploughs supplied by the government has become very much used up ; and though some of them have been renewed and others have been replaced by new ones, paid for by the Indians, yet, at the present time, less than half the working Indians have ploughs at their disposal, and the difficulties of the borrower on the reserve are no less than elsewhere. Men may work in groups at hay-making, but not so conveniently at ploughing, and it has been an aim latterly to encourage the Indians, so far as their means would admit, to provide themselves with this most essential implement.

Education.—There is a day school on each of these reserves, but from various causes, chiefly the indifference of the Indians, the attendance has been small.

Religion.—These Indians belong to the Anglican and Roman Catholic Churches.

Characteristics and Progress.—Here also there is a distinct improvement in the comfort and well-being of the Indians. They are better clothed and fed than formerly ; they are less given to begging and are tolerably obedient to instructions.

Moosomin's and Thunderchild's Bands.

Reserves.—These reserves comprise thirty-six thousand eight hundred and twenty-acres, and are situated on the Saskatchewan river, fourteen miles and nineteen miles, respectively, northwest from Battleford. The soil is light but productive. The scarcity of water, which was felt in dry seasons, is not so noticeable at present. The surface has of late years become so overgrown with bluffs that it is now difficult for the Indians to enlarge their fields or to obtain new fields of a respectable size without clearing.

Tribe and Population.—The population consists of Cree Indians with a small admixture of Saulteaux. They number sixty-four men, sixty-nine women, and one hundred and twelve children ; total, two hundred and forty-five.

Resources and Occupations.—Mixed farming is the regular occupation of these Indians. They had a tolerable yield of grain last season, and the prospects for the present season are much better. Whitecap, the most advanced Indian of the agency, has upwards of forty acres of wheat, oats and barley, all well put in and very promising. Most of these people earn a few dollars occasionally to buy provisions by hauling a load of wood to town.

Stock.—The cattle industry is attended with serious inconvenience, owing to the scarcity of hay on and in the immediate neighbourhood of the reserves, and the wintering of cattle in camps at a distance from the reserves has many disadvantages. Last winter, however, some forty head were wintered by their owners on the reserves, and next winter there will be a much larger number. In every way the individual owners of the cattle are showing more interest in them as their own property than in former years when the cattle were managed as a herd with little discrimination as to ownership.

Farming Implements.—Here, as on the other reserves, the Indians have during the year been allowed to buy a considerable number of implements, chiefly ploughs, mowers, rakes and wagons.

Education.—The day school on Thunderchild's reserve has been fairly well attended, and a boarding school has been opened at the Roman Catholic mission adjacent to Thunderchild's reserve.

Religion.—A few of the oldest have continued to resist Christian influences and adhere to heathen ideas and practices ; but, with these exceptions, the members of these bands belong to the Church of England or to the Roman Catholic Church, and regularly attend their respective services.

Characteristics and Progress.—The material condition of these Indians shows a fair degree of improvement. Many of them display a commendable industry during seeding, haying, and similar seasons of pressing work. In the interval, however, with only a few exceptions, a large part of their time is spent in idleness, while some of the oldest type are still much devoted to visiting and dancing.

Stony Band.

Reserve.—This reserve is situated twenty miles south of Battleford, and consists of forty-six thousand two hundred and eight acres.

Tribe and Population.—The inhabitants number twenty-six men, thirty-four women, and thirty children ; total, ninety. They belong to the Stony tribe, who are apparently allied to the Sioux, and came originally from the south, though those living at the present time all claim to be natives of Saskatchewan. The band consisted formerly of three divisions, and numbered in all upwards of three hundred members. The decrease is accounted for by deaths and desertions, the latter occurring immediately after the rebellion of 1885.

Resources and Occupations.—There are here excellent facilities for farming and stock-raising, but in neither of these industries has any decided success been attained. There is, however, a fair prospect for the present season's crop, and a much larger area than in former seasons has been broken up. Meantime, the Stonies continue to live mainly by the sale of hay and wood in town. There is abundance of hay on the reserve, but wood is becoming scarce.

Stock.—The cattle are of a good class and hardy, being of a Galloway strain. They wintered well under the care of the individual owners. There was considerable

hay to spare, part of which was disposed of in town and part to the Cree Indians of Red Pheasant's reserve.

Farming Implements.—The equipment of farming implements is small, but as these people work rather harmoniously together, it is sufficient for the present.

Education.—There is no day school on this reserve, and but few children from here are in attendance at the industrial school. There seems to be room for the profitable operation of a day school. A report has recently been made to the department on this subject.

Religion.—A few of these Indians belong to the Church of England, but the large majority are pagans. There is no regular place of worship on the reserve.

General Remarks.

Natural Features.—On all the reserves of this agency the surface is undulating, the soil light in places; but, as a rule, moderately fertile; water convenient. Lakes, sloughs, and creeks are everywhere full, and the bluffs which were partially swept away by fires during the dry seasons are now being rapidly restored. Notwithstanding the rains of summer the danger from prairie fires is still great, when the heavy covering of grass that accumulates on the surface becomes dried out in the fall.

Population.—Throughout the agency there were thirty-nine births and thirty-five deaths, giving a net increase from natural causes of four. There are a number of Saulteaux Indians on the plains adjoining the reserves, both to the north and to the south, a few of whom were admitted to treaty. Three women withdrew from treaty by commutation. The total number receiving annuity in 1901 was seven hundred and ninety-two, as against eight hundred and seven in 1900.

Health and Sanitary Precautions.—The health of the Indians has been generally good. Even the prevailing diseases of the Indians have not made their usual ravages. The improvement in food, clothing and cleanliness, in all of which it is noticeable, largely accounts for this. The whitewashing of houses in the fall and the cleaning up of premises in the spring were generally attended to.

Owing to the prevalence, a little further west, of a mild type of small-pox during the winter, our medical officer, Dr. McAdam, made a special tour of the reserves for the purpose of vaccinating, and on examination later, he found that the operation was, in a large percentage of cases, successful. The epidemic did not extend to this agency, however, nor were the Indians at this point visited by any other contagious or infectious disease during the year.

Buildings.—The clerk's house has been rebuilt and rendered very comfortable. It is under one roof with the agency office. Some much needed improvements have been made to the farmhouse on Little Pine's reserve.

Practically no change has been made in the Indians' houses. This is for want partly of building logs, which are scarce on some of the reserves, but more particularly of lumber, which is dear and until now has had to be bought. Since the beginning of June, however, some eighty thousand feet of lumber has been cut at Birch lake, a point fifty miles north from the agency headquarters or forty miles from the nearest reserve ; and it is thought that in spite of the difficulties of freighting the material so great a distance, the results of the sawing will prove a great stimulus to the improvement of the Indians' houses.

Granaries and storehouses are almost entirely wanting, and the need has been much felt during the past year. A portion of the lumber above referred to will be employed for the flooring and finishing of such buildings, which it is the intention to have the Indians erect.

Stock.—*Cattle.*—The cattle show a net increase of forty-seven head during the year, and now number nineteen hundred and forty head. Two hundred and twenty-four head were beefed or sold for the benefit of the respective owners. The loss in connection with wintering was one and a half per cent, and loss from drowning and other accidents about the same.

Sheep.—The keeping of sheep continues to afford a fair profit to five Indians. They are valued chiefly for the meat, as not more than six cents per pound can be realized for wool.

Pigs.—Hog-raising has been made something of a success on several of the reserves. The Indians have on hand upwards of one hundred hogs, after killing a very considerable quantity of pork. For the feed of these a large quantity of unmarketable wheat has been turned to account.

Education.—Apart from the five day schools, which have a combined average attendance of about thirty-five, there are in all seventy-eight children from this agency in the boarding schools, namely, fifty-eight in the Battleford industrial school, nine in the Duck Lake boarding school, and eleven in the Thunderchild's boarding school.

Characteristics and Progress.—Along with the improvement in their material condition that has been mentioned, there are evidences of an increasing ambition to be independent. During seeding time, men and teams were usually in the field between seven and eight o'clock in the morning, and worked with some degree of regularity throughout the season. It is true there are exceptions to this industry, and at other seasons the exceptions are still numerous.

Temperance and Morality.—Several instances of intoxication have been detected during the year and the offenders have been punished, more particularly those who furnished the intoxicant. On the whole, however, there is some improvement in respect to temperance and morality among the Indians.

I have, &c.,

W. J. CHISHOLM,
Inspector, Acting Indian Agent.

NORTHWEST SUPERINTENDENCY,
BIRTLE AGENCY,
BIRTLE, MAN., August 22, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my first annual report of this agency, together with agricultural and industrial statistics for the fiscal year ended June 30, 1901.

Headquarters.—The headquarters of this agency are located at the town of Birtle, which is in the northwestern portion of the province on the northwestern branch of the Canadian Pacific railway. The Birdtail creek runs through the town.

Tribes.—This agency comprises nine reserves, and five are occupied by the Saulteaux and four by the Sioux. The Sioux, or Dakotas, receive no annuity, but were given reserves and assistance in cattle and a few farm implements so as to enable them to make their own living, which they are doing fairly well. The Saulteaux are a branch of the Ojibbewa tribe, but are now known as the Saulteaux. They receive an annuity of $5 each and each headman $15 and each chief $25.

Reserves.—*Birdtail Sioux Reserve, No. 57.*—This reserve has an area of six thousand four hundred acres and is located at the junction of the Birdtail creek and Assiniboine river. The land is a light loam and well adapted for raising grain and root crops. The land in the valley between the two rivers is suitable for grain-growing, being heavier soil than the upland. These bottom lands supply the hay required for stock, but not in sufficient quantities during dry seasons. There are about six hundred acres in wood, mostly scrub, consisting of oak, maple and small poplar. The Assiniboine river borders the south and west, and the Birdtail creek runs through the northwest portion of the reserve.

Oak River Sioux Reserve, No. 58.—This reserve has an area of nine thousand seven hundred acres, and is located about six miles north from Griswold, a town situated on the main line of the Canadian Pacific railway. The soil is a mixture of a light and heavy loam and is well adapted for the raising of grain and roots of all kinds. On some of the hills the land is stony and sandy and is suitable for pasture only. There is about one thousand acres in wood, mostly elm, oak and poplar ; with the exception of elm, the growth is small. The Oak river runs through the northeast corner and empties into the Assiniboine river, which river is the south and east boundary of the reserve.

Oak Lake Sioux Reserve, No. 59.—This reserve has an area of two thousand five hundred acres and is located about four miles north of Pipestone, a small town on a branch of the Canadian Pacific railway. The soil is a sandy loam and about one thousand three hundred acres are suitable for cultivation. There is about one hundred and fifty acres in wood, principally ash, elm, maple and poplar, and one thousand and fifty acres suitable for pasture and hay. The Pipestone creek flows through the eastern portion of the reserve.

Turtle Mountain Sioux Reserve, No. 60.—This reserve has an area of six hundred and forty acres and is located on the northern base of the Turtle mountain. There are ten acres in wood and the remainder is suitable for cultivation and pasture land. Deloraine, a small town on a branch of the Canadian Pacific railway, is the nearest town and post office.

Keeseekoowenin's Reserve, No. 61.—This reserve is located on the Little Saskatchewan river and on the southern base of the Riding mountains, and has an area of six thousand four hundred and forty acres. The Indians of this reserve have also a fishing station on the northern shores of Clearwater lake, about twelve miles northeast from the reserve. They have also leased section 4, township 20, and section 7, township 21, in range 19, west of the first meridian in the province of Manitoba, containing an area of one thousand and twenty-eight acres, more or less, for hay and grazing purposes. The soil is a rich black loam and in the flats along the river there are large hay meadows irrigated by the Little Saskatchewan river, which runs through the reserve. There are numerous lakes and ponds on this reserve. There are one thousand acres in wood, mostly small poplar. Fires have destroyed most of the large timber.

Waywayseecappo's Reserve, No. 62.—This reserve has an area of twenty-four thousand nine hundred and sixty acres, and is located about fifteen miles in a northeasterly direction from Birtle and on the Birdtail creek, which runs through the northeast corner of the reserve. In the southern and western portions there are numerous lakes, ponds and hay meadows. The soil is a heavy black loam, and an effort is being made this season to encourage the Indians to farm, as grain-raising is being made a success by farmers in the vicinity. There are three thousand acres in wood, mostly poplar, suitable for building, and immense quantities of fire-wood. This reserve is well adapted for raising stock.

Valley River Reserve, No. 62½.—This reserve has an area of eleven thousand six hundred and eighty acres, and is located at the junction of the Valley river and Short

creek, and about twelve miles east of Grandview, a small town on the Canadian Northern railway. The soil is a light loam and the pasturage good and most suitable for raising stock. There are one thousand four hundred and sixty acres in wood, mostly poplar and spruce. Fire has done great damage to the timber on this reserve ; there is still good building timber and large quantities of fire-wood on the reserve. There are a number of hay meadows along the Short creek, from which the Indians obtain their supply of hay.

Gambler's Reserve, No. 63.—This reserve has an area of eight hundred and twenty-five acres, and is situated on Silver creek, which is on the east side of the Assiniboine river, and about five miles from Binscarth, a small town on a branch of the Canadian Pacific railway. The soil is a black loam, with poplar bluffs and some scrub oak. The remainder of this reserve has been surrendered and is now for sale. There is only one family, that of John Tanner, living on the reserve.

Rolling River Reserve, No. 67.—This reserve has an area of twelve thousand eight hundred acres, and is located about fifteen miles from the town of Minnedosa. The country is undulating with a great deal of poplar and willow brush, burnt in patches ; there are numerous lakes (four of which contain fish), ponds and hay meadows. The soil is a rich black loam suitable for grain-growing. There are four thousand five hundred acres in wood, some large enough for building purposes, and the remainder only for fire-wood. The Rolling river runs through the reserve.

Vital Statistics.—The population of the bands in this agency is as follows : three hundred and ten men, three hundred and forty-six women and two hundred and sixty-eight young people under fifteen, making a total of nine hundred and twenty-four. There were thirty-nine births and forty deaths during the year.

Health and Sanitary Precautions.—The general health of the Sioux has been fairly good, but I am sorry to say that scrofula is very prevalent amongst the bands, especially at Oak river.

The general health of the Saulteaux bands has been good, with the exception of the Waywayseecappo's, several cases of small-pox having broken out in January and again in March, but I am glad to report that through the excellent quarantine and hospital arrangements made by Dr. Wickwire, the medical officer for the reserve, which were carried out under his instructions, the disease was kept from spreading, there being only five cases. The patients were under the care of two of the Rev. Sisters of Charity, who gave them the best of care during their stay in the hospital. There were two deaths from the disease, and one of these was a consumptive, who would have died in any event, as he was given up by Dr. Wickwire before he contracted small-pox. There are a number of scrofulous cases amongst these bands also. Every precaution is taken in the spring to have all refuse accumulated during the winter months removed and burned. All the Indians with a few exceptions live in tents during the summer months, this gives them an excellent opportunity to clean out thoroughly and whitewash their houses, of which nearly all who own houses, avail themselves. A large number were vaccinated and a number of cases which did not take were attended to during the treaty payments.

Resources and Occupations.—The reserves occupied by the Sioux are well adapted for the raising of grain and cereals of all kinds, and a limited number of cattle can be raised, as the pasturage is first-class. The hay crop is light. Last winter hay being scarcer than usual, mostly all their stock was brought through the long winter on straw rations in fairly good condition, only a few casualties occurring in the spring amongst the weak cows and heifers. The Indians are principally occupied in farming, in the care of stock and working for farmers and others in the vicinity of the different reserves, earning considerable money during the year. They also derive a little from the sale of fish, skins, bead-work, mats, baskets and ponies which they get from the Indians on the American side of the line, and sell for about $15 a head to the farmers

and others in their vicinity. The reserves occupied by the Saulteaux number five, and are well adapted for mixed farming. These Indians farm a little and raise cattle. More acreage has been put under cultivation this season than formerly, and I expect that the Indians will make an effort to increase their acreage for next season and also increase their herds of cattle. These bands make their living from produce of gardens, sale of cattle, hay, senega-root, wood, tanning hides, hunting, fishing and working for farmers and others in their respective districts.

Buildings.—The buildings on all the reserves are mostly log ones, some with shingle roofs, but the majority have still the old-time mud roof. There are also a few frame houses, but the Indians are putting up new and better houses this season to replace their mud-roofed shacks. These will be built with dovetailed corners and will have shingled roofs. There is a tendency for better buildings on all the reserves.

Stock.—The cattle owned by the different bands are in good condition and came through the winter well, only a few casualties occurring in the spring, principally among old cows and young heifers when calving. The bulls on the different reserves were in good condition and with one exception were well taken care of during the winter. Owing to the continued rain fall last autumn there was great difficulty in saving hay after it was cut, tons being destroyed by the constant rains before it could be cured and stacked. Fortunately the winter was favourable and by the Indians making a few sales and exchanges, buying hay and straw, the result was as stated above.

Farming Implements.—The implements are well taken care of and are nearly all purchased by the Indians themselves. A number of new wagons, mowers and binders have been purchased this season.

Education.—The day school on the Oak River Sioux reserve has been closed on account of non-attendance of the children of school age. These will now be sent to the Elkhorn industrial school. The day school on the Keeseekoowenin's reserve, called the Okanase day school, is well attended, having a daily average of about ten. The children seem to take an interest in their studies, and their parents are very anxious for them to be educated. Children from this agency are also attending the Regina, Elkhorn and Brandon industrial schools and the Birtle and Pine Creek boarding schools. A great number of the Indians take no interest in the education of their children and are quite indifferent as to sending them to either boarding or industrial schools.

Religion.—A Sunday and a week day service, Presbyterian, are regularly held on the Birdtail Sioux, Oak Lake Sioux, Keeseekoowenin's, Waywayseecappo's and Rolling River reserves. On the three first the attendance is good, and the Indians seem to take an interest in religious matters, and on the two last named reserves the Indians take very little interest and are mostly pagans. There is also a Roman Catholic service held occasionally on the Waywayseecappo's reserve, and I am told by the Indians that the services are well attended. On the Valley River reserve, Presbyterian, no services are held. There is a Sunday service and Sunday school held on the Oak River Sioux reserve, Church of England ; there are several Christian families who attend the services regularly, but the large majority take no interest and do not attend. There are four churches on the following reserves : Birdtail Sioux, Oak Lake Sioux, one each, Presbyterian ; Waywayseecappo's, two, one Presbyterian and one Roman Catholic. The church at Oak River Sioux is off the reserve and at Keeseekoowenin's and Rolling river, services, Presbyterian, are held, the former in the school-house and the latter in the mission-house, both on the reserve.

The Indians of the Birdtail Sioux and Oak Lake Sioux reserves have an organized 'Ladies' Aid,' and the former contributed $42 and the latter $30 towards the women's foreign mission fund of the Presbyterian Church. This speaks for itself, and reflects great credit on the women of these reserves.

Characteristics and Progress.—These Indians, on the whole, are industrious and law-abiding, and are fairly well-to-do, from an Indian standpoint, having fairly good

houses, farms and stock, and farm implements, and generally earn sufficient money to keep themselves and families supplied with provisions during the year, no rations being issued, except in extreme cases of poverty or ill health. I might mention Wm. Wambdiske, of the Oak River Sioux reserve, who has put up a new frame house, 18 x 24 feet, this summer; all the work has been done by himself and friends, with the assistance of the farming instructor, who showed him how to do the work properly. He intends to have the house painted as soon as he can save sufficient money to buy paint out of his earnings. Keewaytincappo, of the Waywayseecappo's reserve, has completed a new log house, dovetailed corners, and a good shingled roof. Five others of this band have logs out for new houses of the above description. Improvements have also been added to the houses in general, such as good doors and windows, and the roofs of several have been painted. Next year will see a greater improvement along these lines, as most of the Indians are desirous of having larger and more comfortable houses. The Sioux are the better farmers, and have fields of wheat averaging from ten to ninety acres each. I might mention Sunkahonation and Moses Bunn, of th Birdtail Sioux, Harry Hotanina, Itoyetuanka, Caske Hanske and Kinyanwakan, of the Oak River Sioux, who have fields averaging from fifty to ninety acres each, besides smaller fields of oats and garden stuff.

Temperance and Morality.—The Indians of this agency, so far as has come under my notice, are not addicted to the use of intoxicants, although occasionally, when visiting the towns in the vicinity of their reserves, liquor is obtained by them. It is very difficult to find out these offenders against the law. The morality of the Indians compares favourably with that of the Indians on other reserves.

Crops.—Owing to the heavy snow-fall of last winter, and the late spring, ploughing and seeding were late in being finished, the land being generally too wet to work. However, seeding was finished by the end of May, and up to the present time of writing, the weather has been all that could be desired for the rapid growth and ripening of grain and root crops. The yield this season will be the best for some years. Hay will be plentiful, nearly all the sloughs having dried up. The area under crop is the largest ever put in by the Indians of this agency, and the ploughing and seeding have been fairly well done.

Wheat-cutting commenced on August 6, on Birdtail Sioux reserve, and will be general on the other reserves by the 20th.

General Remarks.—I took charge of this agency in November of last year, and up to the end of the fiscal year, June 30, 1901, I have visited all the reserves in this agency twice, with the exception of the Turtle Mountain reserve, which is one hundred and ten miles from Birtle, and two of them frequently on account of their proximity to Birtle, one being thirteen and the other twenty miles distant.

The other reserves are long distances from the agency headquarters, and range from twenty-three to eighty miles.

The Indians of this agency are practically self-supporting, a little flour and bacon only being issued to the old and infirm. Last winter, however, was an exceptionally hard one, owing to the failure of crops and the destruction of hay by the wet weather, and an extra quantity of rations had to be issued to the old people. As the Waywayseecappo's reserve was quarantined for small-pox for a month, rations had to be issued to the Indians during that period; this accounts for the increase of flour, beef and bacon during the year.

Mr. S. M. Dickinson is the agency clerk. He is industrious and painstaking, and performs his duties satisfactorily.

Mr. E. H. Yeomans is the farming instructor, located at Oak River Sioux reserve. He is a practical farmer, and thoroughly understands his duties.

I have received great assistance from the department's employees in carrying on the work of this agency.

I have, &c.,

G. H. WHEATLEY,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—BLACKFOOT AGENCY,
GLEICHEN, August 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report together with statistical statement and inventory of government property under my charge on June 30 last.

Reserve.—There is one reserve, the Blackfoot, in this agency. It is situated on the Bow river, and includes townships 20, and parts of 21, 22 and 23, in ranges 19 to 24, inclusive, west of the fourth initial meridian.

The eastern and western limits are thirty-six miles apart, and the average distance from the north to the south boundary is about twelve and one-half miles. The area therefore is about four hundred and seventy square miles, or more than three hundred acres for every member of the band, *i.e.*, every man, woman and child.

The principal topographical features of this reserve are a low range of dunes about the centre of the reserve and north of the Bow river; a group of sand hills near the western limit and south of the Bow river and a prominent group of hills near the eastern boundary. The Bow river enters the reserve in township 22, and flows serpentinely eastward to near the southeast corner. Crowfoot creek, a much smaller stream, enters the northern boundary in township 21, and empties into the Bow river about ten miles from the eastern boundary of the reserve, while the Arrow-wood creeks enter the reserve near the southwestern corner and fall into the Bow river about ten miles east of the western boundary.

At points along both sides of the Bow river there are prominent sharp-cut banks rising in places more than one hundred and fifty feet above the river. Along these banks may be seen exposures of sandstone of various degrees of hardness and in depth one hundred feet and more, while here and there seams of bituminous coal, ranging from a few inches to several feet in thickness, are plainly visible.

Between these cut-banks are fertile valleys on which there is a rich growth of herbage, affording a splendid pasturage for horses and cattle, and as the waters of the Bow river, like most mountain streams, are cool and clear as crystal, it would be difficult to find a more desirable feeding ground for such animals. Not only in the valleys but over extensive stretches of rich high rolling prairie, to the north and to the south, the horses and cattle love to graze and roam about.

With the exception of small groves of cotton-wood, willow and small spruce along the river and creeks, there is no wood.

Tribe.—These Indians are the original and historic Blackfeet.

Vital Statistics.—The band comprises nine hundred and seventy-five individuals, consisting of two hundred and seventy-four men, two hundred and eighty-four women, and four hundred and seventeen young people under twenty-one years of age.

There were twenty-six births and thirty-seven deaths reported during the year.

Health and Sanitary Precautions.—The general health of the Indians has been fairly good, and I am pleased to be able to report that they have been free from any epidemics. The dwellings and surrounding premises are kept fairly clean, and the refuse that accumulated during the winter months was raked up and burned. The older members of this band having passed through the small-pox scourge of 1870—when some six or eight hundred fell victims of this dread disease—are now mostly immuned to it. The others have been successfully vaccinated within the last two years.



GIRLS' CALISTHENIC CLUB, ST. PAUL'S INDIAN INDUSTRIAL SCHOOL (NEAR WINNIPEG) OCTOBER 10,1900

There is a well equipped hospital on this reserve, which contains two wards. The staff comprises a resident doctor and two nurses. While this hospital is under the auspices of the Anglican Church, all who are in need of treatment are welcome and may enter, and I may add that it is well patronized.

Dr. Lafferty, of Calgary, is the medical supervisor of the reserve and hospital.

Resources and Occupations.—The chief occupations of the Blackfeet are raising cattle, mining and hauling coal, farming, putting up hay for themselves and adjacent ranchers, and day labour of one kind and another. These Indians own in the neighbourhood of three thousand horses, of various degrees of usefulness and value, and are constantly selling off the surplus stock, for which they receive considerable ready money. For a good many years after the consummation of Treaty No. 7, these Indians tried to make themselves believe that it was the imperative duty of the government to supply all their food and other requirements, and many of the band positively refused to accept cattle for fear the government might expect them to support themselves. I am particularly pleased to report that many of this band are now beginning to see things differently in this connection and are now exhibiting evidences of a desire to be self-supporting. Applications for nearly five hundred head of heifers, with which to start at the cattle industry, have been made to me ; but only one hundred head have been available to meet the demand. The animals were asked for under loan, *i.e.*, individual Indians who receive animals under the loan system agree to return the same number of head as that received, at the expiration of five or more years as agreed upon, the Indian lessee to retain for himself the natural increase.

When every able-bodied Indian possesses a herd of cattle, cultivates a reasonable area of land to provide a sufficiency of potatoes, turnips, carrots and garden stuff for household requirements, there will be no necessity for the gratuitous issue of food by the government to strong able-bodied men and women ; and hopes may then be entertained of making these moral weaklings good citizens and a credit and profit to our country, and not a burden and expense.

There is a valuable seam of bituminous coal cropping out of a cut-bank on the south side of the Bow river ; but when there is the greatest demand for fuel, that is, in the months of November and December, the river is liable to be turbulent, and as the Indians have not the proper appliances for transporting the coal across the river to the best markets they do not sell as much as they would under favourable circumstances. They have, however, mined and sold about four hundred tons during the year.

The farming operations are not as extensive as I should like, particularly as regards the growing of potatoes and other roots as well as garden stuff, although I am told—as I have only had charge of this band for less than ten months, I must accept hearsay evidence—that the Indians put in their grain and attended to their root and garden crop better this season than ever before. The crops now promise a fair return, and I trust will be an incentive to them to do greater work in the future.

There are a good many willing workers amongst the members of this band, in fact the great majority are willing to work for cash and quick payment. They prefer to take their wages at the end of each day in preference to waiting for a longer period and will accept less per diem when so paid.

During the last half of the fiscal year they gained considerable money for the work they rendered at the removal of the agency buildings from the site on the Bow river to the new location, just south of the reputed village of Gleichen, by hauling stone and sand for the foundation walls and by work of one kind and another in connection therewith. Roads have been graded up the hills on the main trails leading to both the north and south settlements, and about three-quarters of a mile of road has been gravelled on the trail leading to the south camp. From this it will be seen that a large number of the Indians have not been idle, and from their angle of vision they think that they have accomplished a great deal of hard work since last New Year.

Buildings.—There is a great deal of room for improvement in the direction of better buildings both for themselves and their stock, and I am sure that the department will be pleased to learn that there are evidences of progress right along this line, not so much in what has been done as in an expressed desire to husband their resources with a view of erecting substantial and creditable buildings in the near future ; for example, in the case of Little Axe, he has authorized me to erect a cottage, and has made a deposit of nearly $300 to apply thereon. The balance of the amount required is to be retained out of the proceeds from the sale of several head of cattle which will soon be ready for the market. This cottage is to be 24 x 36 feet in size, and a modern one from an Indian point of view, *i.e.*, it is to be built on a stone foundation wall, which will inclose a roomy frost-proof cellar, and it is to be lathed and plastered, and painted throughout. The cellar has already been excavated and the bulk of the lumber is now on the ground and operations will soon be commenced with a view of completing it in time for use next winter.

Several other members of the band have expressed a desire for better habitations, and have asked me to draw plans and to see that the work was properly performed as soon as they are in a financial position to undertake the job; and, as my advice has also been sought as to the best way to save their income, I have hopes that within a few years there will be a number of good dwellings on this reserve.

Stock.—There are nearly three thousand head of horses, as stated before, owned by members of the band, nearly all of which are of the cayuse or native pony breed. With a view of raising the standard of these horses, a registered Clydesdale stallion was introduced into this band of ponies this season, and I am hopeful that within a few years the standard will be greatly improved. The Indians are much pleased with this sire, and are looking forward to the time when they may expect a better class of colts than from the native stallions. The cattle now number nearly eight hundred head, and I am pleased to be able to report that the objection to taking cattle appears to be on the wane, in fact there are few Indians in the band now that can muster boldness enough to proclaim against the taking of cattle. With very few exceptions the Indians who have cattle care well for them, and view them as worthy successors of the buffalo that at one time roamed the plains and were the main food-stay of these Indians.

Farming Implements.—This band was fairly well supplied with wagons, mowers, hay-rakes, sleighs and other implements, and this season eight new mowers and rakes, four new farm wagons, five stubble ploughs and several sets of working harness have been bought and partly paid for. The balance due thereon will be mostly paid within the next four months from the proceeds of sale of beef-cattle and money earned by work.

Education.—There are three boarding schools in operation on this reserve, namely, the Crowfoot, under the auspices of the Roman Catholic Church; the White Eagle and the Old Sun, under the auspices of the English Church. Several children from this reserve are attending the High River and the Calgary industrial schools in addition to the boarding schools on the reserve.

There are considerably over one hundred Blackfoot children of school age who have never received the benefit of a single day at school, and I am sorry to say are growing up in sight of one of the three schools referred to in ignorance of the benfit to be derived from these institutions. The children who are inmates of these schools are making fair progress, some of course are gaining knowledge more rapidly than others. About sixteen new pupils have been admitted to the three schools on the reserve since I took charge of this agency last October.

Religion.—Two Christian denominations are represented on this reserve, the Roman Catholic and the Episcopalian, with regular service at three points on the reserve. About one-tenth of the band attend these services fairly regularly and a few take an interest in the work. The great majority still cling to the belief of their forefathers.

Progress.—I am pleased to testify that on the whole there have been evidences of progress among the members of the band during the few months that I have been their agent, true, not so many or as great as I should desire, yet sufficient to encourage me in the work and in the hope that these dependent wards of our country may yet be brought to that stage of manhood and womanhood when they will scorn the degrading influence of a ration-house, which robs them of respect for themselves.

Temperance and Morality.—Both intemperance and immorality, I am sorry to report, are too prevalent here. Intoxicants are evidently easily procurable, and these ignorant people apparently either do not know, or do not foresee, the ultimate disastrous result of trifling with this great enemy of the Indians. As intemperance and immorality usually go hand in hand, one can easily understand why the morality is not of that high standard that it ought to be. A number of half-breeds are now in prison at Calgary for supplying intoxicants to the Blackfeet, and four of the Indians are in the same place for violating the law in respect to intoxicants.

General Remarks.—I had charge of the Birtle agency from the summer of 1885 to the end of September last, when I was transferred to this agency, and when I remind the department that the gratuitous issue of food at the former agency did not cost the government over $200 per annum as against $25,000 here, there being about an equal number of Indians in both agencies, the department will not wonder when I say that the change to me was most marked. The food issue to the Blackfeet has cost the government several thousand dollars less the last fiscal year than ever before, which is tangible evidence that the Indians have made a step towards self-support, and to my mind a step upwards.

I have, &c.,

J. A. MARKLE,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—BLOOD AGENCY,
MACLEOD, August 26, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on this agency, together with accompanying statistical statement and inventory of government property, for the year ended June 30, 1901.

Reserve.—The Blood reserve is situated between the Belly and St. Mary's rivers, near Macleod, in southern Alberta, our southern boundary being only fourteen miles from the international boundary. It is the largest reserve in Canada, and covers an area of five hundred and forty-eight square miles of splendid grazing lands.

Tribe.—These Indians are the most numerous branch of the Blackfoot nation, which comprises the Blackfeet near Calgary, North Peigans near Macleod, and the South Peigans in Montana, U.S.

Vital Statistics.—The population of the reserve at last annuity payment was twelve hundred and seventy-nine, viz. :—three hundred and six men, four hundred and forty-four women, and five hundred and twenty-nine young persons, being an increase of thirty-two persons over the previous year. The births were sixty-eight—forty-one boys and twenty-seven girls ; while the deaths numbered thirty-six—twelve men, three women, ten boys and eleven girls.

Health and Sanitary Precautions.—The health of the Indians has been fair during the year, and we have been free from epidemics. Small-pox broke out among the white population in the surrounding towns and villages of Macleod, Lethbridge, Cardston and Pincher Creek ; but a fairly strict quarantine was kept up for a few months, and I am pleased to think we escaped, no trace of the disease being found among the Indians.

The hospital has been taken advantage of much more readily during the past season, the average attendance being about nine patients.

The sanitary condition of the various farms has been good, and all refuse is carefully taken away in early spring. The Indians have been vaccinated regularly by the medical officer.

Resources and Occupations.—Almost the only occupation for these Indians outside of looking after their cattle and horses is hay-making and freighting coal and other goods for the various ranchers and storekeepers of the district. A few, of course, always earn some money by herding, fencing and assisting white men at round-ups, &c. ; but, upon the whole, this does not amount to a large sum. The hay season of 1900 was a very unfavourable one, as far as weather conditions are concerned. The month of September was showery up to the 24th, and from that time until October 1, heavy showers of snow fell from time to time, and this culminated in a heavy snow-storm, which left about eight inches of snow on the already saturated ground. Unfortunately we were busy at the time completing a hay contract, and it was the 22nd before we got finished. Notwithstanding this unfavourable weather, the Indians did well, having cut and stacked some two thousand six hundred and twenty-one tons ; of this amount some fifteen hundred tons were stacked under contract with the Cochrane, Brown and Renfrew ranches, and other settlers in the district, while we had over eleven hundred tons for our own use.

During the fall and winter months the Indians were busy hauling coal for the agency and farms, the Northwest Mounted Police, Cardston settlers and others, and made a good income while this work lasted. The great drawback, however, is want of constant work, and more especially from February until July.

Buildings.—The Indians are from year to year enlarging their houses and other buildings, and although the numbers may not show much of an increase, that is to be accounted for by the fact that the old house is usually turned into a stable and the old stable used as fire-wood. The new houses being erected are of a larger size, and the roofs are much loftier, and usually shingled instead of mud, while large windows are invariably put in, which have a much healthier effect upon the inmates.

Stock.—Cattle-breeding is now our most important industry, and the Indians as a rule take good care of their stock. The herd now numbers two thouasnd five hundred and twelve head. During the year ended December 31, we branded some five hundred and thirty-three head of calves, and at the spring round-up of 1901, five hundred head.

The winter was very open but changeable, and cattle did not do so well as might have been expected, and the grass, with so many chinooks, got musty ; consequently, cattle failed very much in the spring, and a considerable number of deaths took place among the cows and heifers.

One hundred head of heifers were received from the department during the season, and these were issued out to twenty-eight individual Indians, who now hold cattle for the first time. This year, for the first time, the cattle were issued out on the loan system, and the demand for them was just as strong as when given in exchange for ponies. Eight new pedigreed bulls were also received during the summer.

The beef steers and dry fat cows belonging to the Indians were killed during October and November, and numbered seventy-three head. They were all in prime condition, and the three-year old steers gave an average of 841 pounds dressed beef, while the cows averaged 772 pounds—the heaviest steer went 1,043 pounds, and the

heaviest cow 973 pounds dressed. The amount received for these animals was $4,180.

A great demand has sprung up for Indian ponies, and I am pleased to see the Indians taking advantage of this and selling. Over four hundred head must have been sold during the season.

Farming Implements.—From the grazing rents received for white men's cattle running upon the reserve, the Indians have been able to purchase this season fifteen mowers and rakes, twenty-four wagons and ten sets of harness. These are being better cared for than in the past, but there is still a great deal of room for improvement. The Indians are now fairly well supplied with these.

Education.—There are two boarding schools and one day school upon the reserve, while industrial training is given in the Dunbow Roman Catholic and Calgary Church of England industrial schools. The Anglican Church has under its control one boarding school, with a resident population of over fifty, while their day school has an average attendance of about eight. The other boarding school is in the hands of the Roman Catholic Church, and has nineteen resident pupils. Both churches find it hard to get pupils, and this is to be accounted for by the parents' want of interest in educational matters.

Religion.—There are two churches upon the reserve (one Roman Catholic and the other Anglican), and services are also held regularly in the Bull's Horn day school. Very little interest is taken in the white man's religion, and with the exception of pupils and ex-pupils from the schools, the whole tribe may be said to be pagan.

Characteristics and Progress.—These Indians are certainly industrious, and never lose an opportunity to make money at any work that may turn up, but work is not to be found for them except at certain periods of the year.

Progress is steady, and although it may not be possible to point to any one branch, still the fact that the value of the real and personal property of the Indians has increased during the year by $45,000 goes to show that they are improving. The total income of the tribe for the year has increased by $4,549, and now amounts to $29,321, and a considerable sum is also earned which does not come under the notice of the farmers or agent.

Temperance and Morality.—A considerable amount of drinking goes on among these Indians, not only in the surrounding towns and villages, but upon the reserve, and few dances took places last winter at which intoxicants of one kind or another were not to be had. The great difficulty in getting this stopped is the large number of half-breeds who hang around these places, and who, in many cases, have no other means of making a living.

General Remarks.—The visit of their Excellencies the Governor General and the Countess of Minto to this agency in September last was greatly appreciated, and they were given a loyal and hearty welcome by the Indians. The afternoon was devoted to the usual talk, after which His Excellency made a very happy reply. Everything passed off in a very quiet and orderly manner, and I am sure the Indians will long remember this kind act on the part of their Excellencies.

This year the Blood Indians again held a sun dance, and were camped together for over four weeks. A large party of Blackfeet, North Peigans and Sarcees were also present to assist them.

I have, &c.,

JAS. WILSON,
Indian Agent.

NORTHWEST TERRITORIES,
SASKATCHEWAN—CARLTON AGENCY,
MISTAWASIS, August 28, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of this agency for the year ended June 30, 1901.

WILLIAM TWATT'S BAND, No. 101.

Reserve.—The reserve of this band lies twenty-five miles north of Prince Albert, and has an area of twenty-two thousand and sixteen acres. The Sturgeon lake, twelve miles in length, traverses it in an easterly direction. The northern extremity is heavily wooded with spruce and poplar, the remainder being largely prairie, a portion of which is sufficiently fertile for cultivation.

Tribe.—These Indians belong to the Cree tribe.

Vital Statistics.—The population consists of thirty-five men, forty-two women, and sixty-nine children, making a total of one hundred and forty-six. There have been six births and nine deaths during the year, causing a decrease in the band of three.

Health and Sanitary Precautions.—The high death-rate during the year was chiefly due to old age, infantile disorders and scrofula. Sanitary measures are enforced as strictly as possible and vaccination attended to.

Resources and Occupations.—The members of this band still depend largely on hunting and fishing for their living. Only a small number engage in farming, and owing to the crops being generally damaged or destroyed by frost, it has proved very unsuccessful and discouraging. The lumbermen give employment to all who are willing to work, and many of the young men are thus engaged at good wages, while others earn considerable by freighting and putting up hay for the lumber camps.

Buildings.—There are ten comfortable houses on the reserve, the others being the low flat-roofed shanties.

Stock.—The stock consists of cattle and horses, but, owing to the men having to leave the reserve in search of work, very often the cattle are poorly attended to.

Farming Implements.—The implements are well taken care of, and until last year were all supplied by the department.

Education.—These Indians are much opposed to education and the day school which adjoins the reserve had to be closed last winter. Four children are attending industrial and boarding schools.

Religion.—There is no church on this reserve, occasionally services are held in the school-house by a Church of England missionary, but the attendance is never large, as these Indians stick tenaciously to their old heathen customs and beliefs.

Characteristics and Progress.—Excepting the old members of the band, these Indians are becoming more industrious each year. Having to depend largely on their own resources, there is an independence about them not seen in bands much more civilized.

Temperance and Morality.—They are on the whole temperate and moral, only a few of them being addicted to the use of liquor.

PETAQUAKEY'S BAND, No. 102.

Reserve.—This reserve is located at Muskeg lake, twenty miles northwest of Carlton, and has an area of twenty-six thousand eight hundred and eighty acres. The soil is a rich sandy loam, being rolling prairie, suitable for mixed farming. Hay, wood and water are plentiful.

Tribe.—These Indians belong to the Cree tribe.

Vital Statistics.—The population comprises nineteen men, twenty-three women, and forty-one children, making a total of eighty-three. There have been four births and two deaths, with one migration, making an increase over last year of one.

Health and Sanitary Precautions.—The health of this band has been good. The houses and premises are kept clean, and those requiring vaccination have been attended to.

Resources and Occupations.—Farming, stock-raising, freighting and digging roots are the chief occupations of this band. Grain-growing is proving more profitable each year and the acreage under cultivation is being largely increased. The Indians also cultivate good gardens.

Buildings.—With three exceptions, the houses have shingled roofs, are well built, and present a neat and comfortable appearance. The stables are first-class and kept in good repair.

Stock.—The cattle on this reserve are of a superior quality, and are well cared for by the Indians. The favourable conditions of the reserve for stock make it a very profitable industry for the Indians.

Farming Implements.—The implements formerly supplied by the department are becoming worn out, but the Indians are now buying for themselves, and very soon each one will be well equipped with everything required.

Education.—There is no school on this reserve, as all the children of school age are attending the Duck Lake boarding school.

Religion.—The Indians of this band are Roman Catholics. They have a church on the reserve with a resident missionary. These Indians take more than ordinary interest in religion and attend services very regularly every Sabbath.

Characteristics and Progress.—These Indians are law-abiding and industrious. While no rapid strides are being made, they are gradually becoming better off, and with a few more favourable seasons for farming, they should be self-supporting.

Temperance and Morality.—During the year no cases of intemperance have come to my notice, and the morality of the band is fair.

MISTAWASIS BAND, No. 103.

Reserve.—This reserve is situated at Snake plain, tewnty-five miles north of Carlton, and has an area of forty-nine thousand two hundred and eighty acres. The soil is a sandy loam, the higher parts being suitable for agricultural purposes. Hay and water are plentiful, and enough timber grows on the reserve for all purposes.

Tribe.—These Indians are Crees.

Vital Statistics.—The population is composed of thirty-two men, thirty-eight women, and fifty-six children, making a total of one hundred and twenty-six. There have been three births, seven deaths and one migration, making a decrease of five in the band.

Health and Sanitary Precautions.—Apart from consumption and scrofulous diseases, which are deep-rooted in this band, the health has been fairly good. Two cases of typhoid fever occurred last fall, but by having prompt medical attendance neither proved fatal. Every precaution was taken to keep the disease from spreading, so that it was confined to one family. Sanitary measures are enforced as strictly as possible.

Resources and Occupations.—Mixed farming is followed here, and along with freighting and digging roots keeps the Indians employed. Owing to frost, grain-growing is uncertain as well as discouraging. Cattle-raising proves more profitable, and is the chief source of income of those who look after their stock properly.

Buildings.—Nearly all the dwellings are well built and roomy, with good floors and shingled roofs, and are kept in good repair.

Stock.—The cattle are in good condition, and with few exceptions are well cared for. The surplus stock beefed and sold each year provides the Indians with implements and tools, as well as many of the necessaries of life.

Farming Implements.—They have everything required for farm work, and take good care of their implements, more especially those that they have purchased themselves.

Education.—There is a day school on this reserve, the attendance always being small owing to the large number of children at boarding and industrial schools.

Religion.—The Rev. W. S. Moore, B.A., has charge of the Presbyterian mission here, and the services are attended by about two-thirds of the band, the remainder belong to the Roman Catholic Church, and, living in the part of the reserve adjacent to Muskeg lake, attend service there.

Characteristics and Progress.—While there are some who are indolent and indifferent, there are others who, for Indians, are doing remarkably well and becoming more self-supporting each year.

Temperance and Morality.—A few are addicted to the use of intoxicants, but rarely have the chance of procuring liquor, so that no cases of drunkenness have come to my notice. With the exception of a few of both sexes, their morals are all that can be desired.

Ahtahkakoop's Band, No. 104.

Reserve.—The reserve of this band is situated eighteen miles north of Mistawasis, and has an area of forty-three thousand and eight acres. Sandy lake, five miles in length, lies within its limits, while the Shell river traverses the whole length of the reserve in a southeasterly direction, giving an abundant supply of good water. The soil is light, but will give good returns in favourable seasons. Only a small portion of the reserve can be cultivated, as it is much broken with hills and ravines. Timber, consisting of poplar, spruce and tamarack, is plentiful.

Tribe.—These Indians are Crees.

Vital Statistics.—The population consists of forty-three men, fifty-five women and one hundred and six children, making a total of two hundred and four. There have been seven births, nine deaths and one migration, making a decrease in the band of three.

Health and Sanitary Precautions.—This band cannot be considered healthy. Consumption and other hereditary diseases claim a number of victims every year. Sanitary precautions are strictly observed, the houses and premises being kept clean.

Resources and Occupations.—Stock-raising, farming and freighting are the chief occupations of this band. There are a few who derive a considerable income by hunting and digging senega-root, while nearly all cultivate good gardens.

Buildings.—On this reserve the houses are good. Many of them have sleeping-rooms up stairs and the roofs shingled.

Stock.—The cattle on this reserve suffered somewhat severely last winter from scarcity of feed. The swamps being full of water, only ridge hay, very inferior in quality, could be secured.

Farming Implements.—These Indians now purchase all their own implements and take a great deal better care of them than when supplied by the department.

Education.—A new school-house was built on the reserve last year to replace the old one. The attendance still continues fair, and good progress is being made.

Religion.—The Church of England claims the most of this band as members. There is a comfortable church on the reserve. The Rev. D. D. McDonald is the missionary in charge.

Characteristics and Progress.—These Indians are as a rule thrifty and industrious, but very easily discouraged, and require a good deal of oversight on the part of the farmer to keep them at work. Quite a number are doing well and becoming better off each year. If the men were more robust in health, more progress would be made, as the best ones are physically unfitted for hard work.

Temperance and Morality.—They are on the whole temperate and moral, only a few of them being fond of liquor.

KAHPAHAWEKENUM'S BAND, NO. 105.

Reserve.—The reserve of this band is located one hundred and thirty miles north of Battleford and has an area of eight thousand nine hundred and sixty acres. The soil is rich, and hay plentiful.

Tribe.—These Indians are Crees.

Vital Statistics.—The population comprises seventeen men, twenty women and thirty-six children, making a total of seventy-three. There were two births, one death and five migrations, making an increase of six.

Health and Sanitary Precautions.—The health of these Indians has been good. Dr. Lyerman visited them during the payment of annuities and vaccinated those requiring to be operated upon.

Resources and Occupations.—Game and fish are their only resources, and in pursuit of these they frequently leave the reserve.

Buildings.—There are only two buildings on the reserve occupied at present. The shanties are occupied only in winter.

Stock.—Their stock consists of a few ponies, which they use in moving their camp.

Farming Implements.—These Indians have a plough, set of harrows and a few gardening tools.

Education.—A day school has again been opened on the reserve, the success of which remains to be seen.

Religion.—The majority of this band are pagans. The few that profess religion belong to the Roman Catholic Church and are under the care of Rev. Father Leston, of Green Lake, who visits them at stated periods.

Characteristics and Progress.—These Indians are law-abiding and industrious, but prefer hunting to working on their reserve for a living.

Temperance and Morality.—They are fairly moral and, excepting two or three, are not given to strong drink.

KENEMOTAYOO'S BAND, NO. 118.

Reserve.—This reserve is situated at Big river, twelve miles north of Sandy lake, and contains an area of twenty-nine thousand six hundred and sixty-four acres. The soil is light, wood is plentiful, and several fine fishing lakes are within its limits.

Tribe.—These Indians are Crees.

Vital Statistics.—The population consists of twenty-two men, twenty-seven women and fifty-four children, making a total of one hundred and three. There have

been three births, six deaths and two migrations, making a decrease in the band of five.

Health and Sanitary Precautions.—The health of this band during the winter was poor, due largely, I think, to their living in very small, badly ventilated houses.

Resources and Occupations.—Attempts have been made at farming with only partial success. The scarcity of hay, which was so plentiful three years ago, prevents the stock increasing, so that hunting and fishing are their only means of support, along with the rations received.

Buildings.—The buildings are small and poorly built. Several sets of logs were taken out last winter, so that these small shanties will soon be replaced by comfortable houses.

Stock.—There is only a small number of cattle on the reserve, which are well taken care of, the Indians taking great pride in being cattle-owners.

Farming Implements.—The department supplies some each year, so the Indians have enough for their present requirements.

Education.—Education has been almost entirely neglected in the past. A day school has now been opened on the reserve, which should give good results, as the parents are desirous that the children should be educated.

Religion.—About one half the band belong to the Church of England, the rest being pagans.

Characteristics and Progress.—These Indians are very indolent, and it requires a great deal of pushing to get them to do any kind of work. Little progress has been made since they settled on their reserve, but I am in hopes they will now do better, a farm instructor having recently been appointed for this reserve.

Temperance and Morality.—They are temperate and few cases of immorality come to my notice.

Pelican Lake Indians,

These Indians are a part of Kenemotayoo's band, but live separately on the shores of Pelican lake, about sixty-five miles from Mistawasis.

Vital Statistics.—Those in treaty number nine men, fifteen women and twenty-eight children, making a total of fifty-two. During the year there were two births, eight deaths, and three joined the band, making a decrease in the band of three.

Religion.—These Indians are all pagans.

Education.—None of the children have been educated.

Occupations.—These Indians make their living entirely by hunting and fishing.

Wahspaton's Band, No. 96A (Sioux).

Reserve.—The reserve of this band is situated nine miles northwest of Prince Albert, and contains an area of two thousand four hundred acres. The soil is generally light, but can be successfully farmed in favourable seasons.

Tribe.—These Indians are Sioux.

Population.—The population consists of twenty-three men, twenty-five women and fifty-five children, making a total of one hundred and three.

Health and Sanitary Precautions.—The Indians of this band cannot be called healthy : living convenient to Prince Albert they receive prompt medical attendance, still the death-rate is high, especially amongst the children. Sanitary measures are carried out carefully by each family residing on the reserve.

Resources and Occupations.—Only a part of the band live on the reserve and engage in mixed farming. During the winter they cut and sell fire-wood at Prince Albert.

Buildings.—The buildings are generally small, but are kept in a neat and clean condition.

Stock.—A few head of cattle and ponies are all they possess. They take good care of their animals, but can never keep many owing to the scarcity of hay.

Farming Implements.—They have all they require and take good care of them.

Education.—There is a day school on this reserve, which is well attended by all the children of school age, with good results.

Religion.—These Indians belong to the Presbyterian Church. They have a resident lady missionary on the reserve.

Characteristics and Progress.—These Indians are industrious and law-abiding, and in a few instances are becoming better off.

Temperance and Morality.—Their conduct in these respects is satisfactory.

Reserve No. 106A.

This reserve is located north of Sturgeon lake on the Little Red river, and is intended for any of the Indians of the northern bands who may wish to settle on it. Only a few families have yet done so ; these are making their living by cultivating gardens, freighting, and selling hay to the lumbermen who have camps in their vicinity.

William Charles' Band.

These Indians live on the shores of Montreal lake, and make their living by hunting and fishing. There is a day school under the auspices of the Church of England, situated at a convenient point on the lake, and several children are attending Emmanuel college at Prince Albert. They all belong to the Anglican Church, and are very sincere and devout Christians.

James Roberts' Band.

The Indians of this band live in the neighbourhood of Lac la Ronge. They nearly all profess religion and belong either to the Anglican or Roman Catholic Church. Hunting and fishing are their chief means of support, and in these pursuits the education of the children is almost entirely neglected. They are moral and temperate in their habits.

Peter Ballendine's Band.

These Indians, formerly a part of James Roberts' band, occupy the country round Pelican lake, and along the shores of the Churchill river. All are Christianized and are either Anglicans or Roman Catholics.

General Remarks.

The agency headquarter buildings are located on the Mistawasis reserve on the trail leading from Carlton to Green lake. Some much needed repairs are being put on the miller's and agent's dwellings, while the fences round the agency headquarters are being rebuilt. During the year there has been no infraction of the law throughout the agency, and the Indians have shown a desire to conform to the rules of the department.

I have, &c.,

W. B. GOODFELLOW,
Indian Agent.

NORTHWEST TERRITORIES,
EASTERN ASSINIBOIA—CROOKED LAKE AGENCY,
Near BROADVIEW, July 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report with agricultural and industrial statistics together with inventory of government property under my charge up to June 30, 1901.

Agency Office.—The agency buildings are situated on the northeast quarter of section 4, township 18, range 5, west of the 2nd meridian, about nine miles northwest of the town of Broadview, on the main line of the Canadian Pacific railway.

Reserves.—The reserves are as follows : Ochapowace's, No. 71 ; Kahkewistahaw's, Nos. 72 and 72A; Cowesess', No. 73, and Sakimay's and Shesheep's, Nos. 74 and 74A, all lying north of the Canadian Pacific railway, and extending from Whitewood on the east, passing Broadview, and running west nearly as far as Grenfell, bounded on the north by the Qu'Appelle river, from below Round lake on the east, to a short distance above Crooked lake on the west.

There is also Little Bone's reserve, No. 73A, situated at Leech lake, about forty miles north from this agency.

The total area of these reserves is one hundred and eighty-one thousand six hundred and seventy-six acres.

OCHAPOWACE'S BAND, NO. 71.

Reserve.—This reserve is on the eastern side of the agency, and lies northwest of Whitewood, running from a short distance from the line of railway to the Qu'Appelle valley. It contains fifty-two thousand eight hundred and sixty-four acres. The southern portion is prairie with many hay swamps, and bluffs of poplar and willow. The northern portion sloping to the Qu'Appelle river is thickly wooded with poplar and balm of Gilead, is much broken by large ravines which are all thickly wooded. The soil is very gravelly, being largely unfit for cultivation. On the southern portion of this reserve the soil is a sandy and clay loam with gravelly spots here and there.

Tribe.—The Indians of this band are Crees.

Vital Statistics.—There are on this reserve thirty-one men, thirty-eight women and thirty-nine children, making a total of one hundred and eight.

Health and Sanitary Precautions.—The general health of the Indians is good, with the exception of the usual cases of consumption. They have been following the instructions of the department in burning up refuse, and have kept their houses fairly clean. There has been no epidemic amongst them, and they are well looked after by Dr. James R. Bird, who lives in their near vicinity.

Resources and Occupations.—The farming on this reserve is not as good as on the other reserves in this agency. The Indians have large quantities of hay, which can be disposed of at Whitewood. They also dig and sell senega-root, do some fishing, sell berries, dry fire-wood and tan hides. The reserve is well adapted for cattle-raising, and I am trying to induce the Indians to devote more of their attention to that particular industry.

Buildings.—The houses and stables are built of logs, most of which are very old. In a good many cases they were repaired last winter and new logs taken out to replace them.

Stock.—What stock they have is of good quality. It is not increasing very much owing to the fact that the Indians do not like the extra work of building good stables and the necessary work in wintering the cattle, and last winter the feed was scarce and of poor quality. The prospects are bright this year.

Farming Implements.—These Indians have a sufficiency of implements and tools.

Education.—Six of the children are attending the Round Lake boarding school, three are at Cowesess' boarding school, and four are at the Qu'Appelle industrial school, where they all receive the best of care and instruction, according to their ages, in the different industries that are taught. They are making good improvement, although some of the children are, I think, kept too long in the boarding schools before being transferred to the industrial schools.

Religion.—Not much progress has been made during the year in converting these Indians; the children attending the different schools have been baptized according to the denomination into which they enter. As the Rev. Hugh McKay resides at, and is principal of the Round Lake boarding school, in the near vicinity to this reserve, he has done his best to enlighten the Indians in the Protestant faith, being assisted by Jacob Bear, an Indian missionary of the Presbyterians. There are also some few Roman Catholic converts on the reserve.

Characteristics and Progress.—These Indians are willing to work when they see some result. They have had the misfortune to have had bad crops and hay for the last two or three years, but they have persevered and this year, I have no doubt, will do well. There are three in particular that are progressing well, viz., Pierre Belanger, Little Assiniboine and Kassooquawenum, as well as two or three others that are improving and will soon do as well as the above mentioned.

The farming instructor in his new dwelling, being in nearer touch with them, will no doubt be a help to increased effort, as he can visit them daily when necessary.

Temperance and Morality.—There has been no case of drunkenness or immorality brought to my notice, which speaks well for the Indians, as living in the vicinity of Whitewood and Broadview, and visiting these places so frequently with wood and hay for sale, they undergo considerable temptation.

Kahkewistahaw's Band, No. 72.

Reserve.—This reserve joins that of Ochapowace's band, on the west side, and lies north of Broadview, on the Canadian Pacific railway ; the Qu'Appelle valley is its northern boundary. There is also a small fishing station belonging to this reserve (No. 72A), at the eastern end of Crooked lake, about ten miles distant.

The reserves contain an area of forty-six thousand eight hundred and sixteen acres. The land is mostly undulating prairie of a fair quality, interspersed with many ponds and hay sloughs, with bluffs of poplar. There are some very good hay lands in the southern part.

Tribe.—The Indians of this band are Crees.

Vital Statistics.—The population of this band consists of thirty men, thirty-three women and forty-seven children, making a total of one hundred and ten.

Health and Sanitary Precautions.—The health of these Indians has been fairly good; there have been some cases of scrofula and consumption, but no epidemic of any kind. They carry out instructions in reference to having refuse and keeping their houses clean in winter, living in canvas tents in summer. They are also attended by the medical officer, Dr. Bird.

Resources and Occupations.—They have a good reserve for farming and stock-raising, which they follow with fair success, but in both of these there is room for improvement, and I continue to impress upon them the necessity for doing so. They sell hay and fire-wood, and the older people sell senega-root and berries at the nearest villages. They also fish in Round lake, which helps the food supply. There is no hunting, except prairie chickens and ducks in the fall.

Buildings.—Their dwellings are log, as are the stables ; they are comfortable, and have been repaired this year. Some are old, and I expect when replaced they will be of better material. They live in canvas tents during the summer.

Stock.—Their stock is of good grade, but increasing only slowly on account of the bad feed last winter, and using some for their own food, as their crops failed last year.

Implements.—Their supply of farming implements is larger than they make use of, but I expect an improvement.

Education.—Fourteen of their children are at the Round lake boarding school, one at the Cowesess' boarding school, and seven at the Qu'Appelle industrial school ; and from reports received and what I have seen, the improvement is as good as can be expected. I would like to see the larger children transferrd at a younger age to the industrial schools from the boarding schools, as it would benefit both.

Religion.—Nearly all the Indians on this reserve are pagans, with the exception of those belonging to the Presbyterian Church, which denomination has a very neat and comfortable church on the reserve, where services are conducted by the Rev. Hugh McKay, or Jacob Bear, every Sunday. It is difficult to make much improvement on the older Indians, even though they attend the services.

Characteristics and Progress.—Some of these Indians are doing well, they are willing to work. They are careful of their stock, and wish to get ahead, and seem to take some interest in the future.

They had a very hard winter on account of the failure of crops and hay, but this spring they have done very well, having put in a good acreage, and their prospects are brighter for the coming year.

The following, Louison (headman), Mesahcamapeness and Arthur Wahsacase are leaving the valley and are breaking up new land between the agency headquarters and Broadview, building good houses and stables, and will have the opportunity of having good hay-land in the vicinity, as well as farming-land. Alec is another very good worker, and he has in a very large crop of wheat in the valley. These four are good examples to the rest, both in cattle-raising and farming.

Temperance and Morality.—These Indians, with one exception, have been temperate and moral, as far as brought to my notice. The one exception was an Indian named Sagetassewenin, who, while under the influence of liquor, near Broadview, shot and wounded his mother-in-law, but not seriously. A warrant has been issued for his arrest, but he has gone to the United States, it is supposed.

Cowesess' Band, No. 73.

Reserve.—This reserve is also situated between the line of the Canadian Pacific railway on the south and the Qu'Appelle valley on the north, and is west of Kahke-wistahaw's reserve. The area is forty-nine thousand nine hundred and twenty acres. The Weed creek runs through this reserve, and empties into the Qu'Appelle river, through a large densely wooded and steep ravine, which is very tortuous in its course. The southern portion of the reserve is undulating prairie, with a few good hay marshes.

Tribe.—The majority of these Indians are half-breeds, the remainder being Saulteaux and Crees.

Vital Statistics.—This band contains thirty-two men, forty-nine women, and seventy-four children, making a total of one hundred and fifty-five.

Health and Sanitary Precautions.—The health of these Indians has been about as usual, consumption and scrofula claiming a few victims. They carry out instructions in reference to cleanliness very well, and it is more necessary in their case, as they do not live in tents in the summer, only during haying. They are well attended by Dr. A. W. Allingham, assistant to Dr. Bird, whose advice and medicine is of great benefit to the Indians. There were no epidemics on the reserve.

Resources and Occupations.—Nearly all the Indians keep stock, and keep it in good condition. Their farming is better done than usual amongst Indians, as they are mostly half-breeds, and are better supplied with good machinery and implements to do the work. They have also good heavy work horses, as well as oxen, so that when the season is good they make a good living, and are very little in debt to any one. They also sell hay and fire-wood ; the older people sell senega-root, berries and fish. They are very industrious as a rule.

Buildings.—These Indians live in a better class of log houses than most of the other Indians in this agency, and this year are buying more lumber, so as to put in partitions and shingle roofs on some new buildings being erected. They have also a good class of log stables.

Stock.—Their stock is of a very good grade, which they keep in very good condition, as the animals are well taken care of during the winter, and are making a fair increase.

Farming Implements.—The Indians have a good supply of implements, such as binders, mowers, seeders, disc harrows, wagons, and mostly all are paid for. It is likely, if the crops turn out as expected, they will clear off the balance of the debts this year. They require more implement-sheds, which they have promised to put up.

There is a good grist-mill on this reserve for use of all the bands, and I have no doubt, from the present outlook of the wheat crop, that it will be kept busy during the whole winter. There is also a steam thresher; both mill and thresher are under the supervision of Mr. James Sutherland, who is a capable and practical man.

Education.—There are nineteeen children attending the Qu'Appelle industrial school; thirteen are at the Cowesess' boarding school, three at the Round lake boarding school, one at the Regina industrial school, and one at the Elkhorn industrial school.

These Indians understand the value of education, and as the Cowesess' boarding school is on the reserve, they send their younger children there and the older ones to Qu'Appelle industrial school. Some few only attend the Round lake boarding school.

The boarding school on this reserve is complete in every way, having modern improvements in water-works, and acetyline lights worked by a gasoline engine, the necessary requirements not yet supplied being suitable fire-escapes, as the building is frame and four stories in height.

Religion.—The majority of these Indians are Roman Catholics, and there are two Roman Catholic priests and a brother at the mission, who live at the Cowesess' boarding school, which is adjacent to Crooked lake, of which school the Rev. Father Perrault is principal. There is a good church at the mission, which is well attended. The Rev. Hugh McKay, Presbyterian, holds services on the reserve at stated intervals, but the number of Protestants is small.

Characteristics and Progress.—The members of this band are industrious, a number of them having good-sized farms, well fenced, also pasture-fields, so as not to lose so much time in hunting their stock during the busy season. Being mostly half-breeds, their ways of working more nearly approach the ways of white men. The difficulty is to get some of them to put in less crop and cultivate the land better to get rid of the weeds.

The amount of seeding done this year was very satisfactory, and promises to be a good yield.

I can mention the following as being some of the best workers : Chief Nepahpeness, Alex. Gaddie, Ambrose Delorme, Baptiste Henri, J. B. Sparvier, for farming; and Zac LeRat, for progress in raising cattle.

Temperance and Morality.—I have no complaint to make against this band for intemperance or immorality, their only failing being a fondness for gambling, but not to any great excess.

Sakimay's Band, No. 74.

Reserve.—This reserve is situated on the west side of the northen half of Cowesess' reserve, being bounded on the south by that reserve, and on the north by Crooked lake and the Qu'Appelle valley, a small portion of the reserve (No. 74A) being on the north side of the lake and river.

This reserve contains twenty-five thousand two hundred and eighty acres. In addition to this, these Indians have the Leech Lake reserve, No. 73A, situated forty miles north, containing six thousand nine hundred and seventy-six acres, which, being mostly hay swamps, bluffs and water, is very valuable to them, as the hay crop can be relied upon every season.

Sakimay's reserve is mostly undulating prairie, with some bluffs of poplar and willow. In the northern part it is much broken by ravines which are heavily wooded. There were formerly large ponds on this reserve, which have been for some years mostly dried up, although now some of them are becoming again filled with water. About one-half of the land is good loam ; the other half is gravelly. There are some magnificent hay-lands at the west end of Crooked lake.

Tribe.—Nearly all these Indians are Saulteaux, with a few Crees.

Vital Statistics.—The population consists of forty-five men, fifty-five women and one hundred and four children, making a total of two hundred and four.

Health and Sanitary Precautions.—The health of these Indians has been about as usual ; they suffer from scrofula and consumption a little more than the others, on account, I think, of there being more hay swamps at the western end of the reserve. They carry out the instructions in reference to sanitary arrangements, and are looked after by the medical officer, who has attended several that met with accidents, none of which were fatal. There were no epidemics.

Resources and Occupations.—Three parties occupy this reserve in common, namely, Yellow Calf's, Shesheep's and Little Bones' of Leech Lake reserve. Yellow Calf's party occupy the south part of the reserve and follow farming and stock-raising, as also do the party from Little Bones' band and from Leech Lake reserve. Considerable money is collected every year for permits to cut hay sold to white settlers at forty cents per ton, which is credited to the band by the department and used for purchasing necessary tools and implements.

They also sell hay and fire-wood, senega-root and berries. They also fish in Crooked lake.

Shesheep's party, who occupy the north part of the reserve, depend on fine large hay meadows from which they make a good living by selling hay to settlers and in Grenfell, also in wintering stock for outside parties and Indians that did not have the opportunity to put up sufficient hay.

They also sell dry wood and small game in season.

They are very stubborn about farming and raising cattle, but there are two or three of them that were induced to commence farming on a small scale this year.

Buildings.—Considerable improvements have been made in the buildings by repairs this year, and I have no doubt when crops are better that the class of houses



Band of the St. Paul's Indian Industrial School (near Winnipeg), October 10, 1900.

will improve. They are now log houses and some are very old ones. The neatest houses are at Shesheep's. There are some good log stables on the reserve.

Stock.—Yellow Calf's and Little Bone's parties have a good herd of grade cattle, which are well looked after, and the herd is increasing slowly.

Farming Implements.—Their stock of farming implements is sufficient with the exception of a binder, for which the band has enough money to purchase one for itself.

Education.—Nine of the children are at the Qu'Appelle industrial school, four are at the Elkhorn industrial school and six are at the Round Lake boarding school. Since last year four children have been sent to the Elkhorn school and one more to the Round Lake school.

There are a number of children of school age at Shesheep's, but the band continues obstinate against sending any voluntarily. I am using every effort and may succeed in getting them to have a day school for a beginning. The trouble is with the older Indians, who strongly object and wish to keep up their old ways.

Religion.—They are nearly all pagans, with a few exceptions who are Presbyterians. The Rev. Hugh McKay has purchased a large building in Yellow Calf's village which he is fitting up as a church and will hold regular services there, and I have no doubt with good results.

Characteristics and Progress.—These Indians taken altogether are good workers, but need, like most of the others, constant supervision. There has been a marked improvement since last year in the quality of the farming done. Some of the old fields had to be abandoned on account of weeds, and this year it is mostly new land under cultivation.

The crops have a fine appearance of an extra good return.

Temperance and Morality.—These Indians compare well with the others, but, being so much more scattered, it is harder to keep such a close supervision over them, particularly Shesheep's party, where some of the younger men are not temperate. I have asked the Northwest Mounted Police at Grenfell to watch them closely.

General Remarks.—I am pleased to state that, although the Indians in this agency passed through such a hard winter, which cost some of them considerable money for wintering cattle, and at times they had great difficulty in getting sufficient food for themselves, this spring they all in the best of spirits started to work, bought seed grain, which cost they will return to the department, broke new land, put in a good crop, and expect to put up large quantities of hay.

I hope the grist-mill on this reserve will be kept busy for six months and that the Indians will have enough surplus flour and wheat besides their seed for next year to pay up their debts and live comfortably next winter.

Although the winter was so severe and long, the loss in cattle was not larger than occurred to some of the white settlers.

There was an attempt to start the 'Give Away' dances, which I stopped after the first one. There was no sun dance, and it was only asked for by some of the very old Indians.

Rations are not given to any person except those too old to work. Hay, fire-wood and work required for the farms, mill and headquarters, is exchanged with the Indians for food and clothing at regular prices, with which they are satisfied.

It is greatly on account of the efficient help I receive from the staff here that I consider such good work has been done in this agency.

I have, &c.,

MAGNUS BEGG,
Indian Agent.

NORTHWEST TERRITORIES,
SASKATCHEWAN—DUCK LAKE AGENCY,
DUCK LAKE, July 20, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of this agency for the year ended June 30, 1901.

ONE ARROW'S BAND, No. 95.

Reserve.—The reserve of this band lies on the east side of the south branch of the Saskatchewan river, four miles east of Batoche, having an area of sixteen square miles.

The soil is generally sandy (excepting a small portion of sandy light loam) and during a dry season could not be depended upon to produce a crop.

Tribe.—These Indians are Plain Crees ; the older ones are a miserable lot, physically weak, prejudiced, standing where they are until the end. Some of the younger ones are quite the opposite and will get on.

Population.—The population is seventeen men, twenty-eight women, twenty-seven boys, and twenty-two girls, in all ninety-four souls.

OKEMASSIS' AND BEARDY'S BANDS, NOS. 96 AND 97.

Reserves.—The reserves of these two bands are at Duck lake, the total area making forty-four square miles. The soil on Okemassis' reserve is sandy and not to be depended upon ; on Beardy's the south and west portions of the reserve are good, being a clay loam and just the soil for wheat.

Tribe.—These Indian are Plain Crees.

Population.—The number in Okemassis' band is seven men, nine women, three boys, and four girls, in all twenty-three souls ; in Beardy's band there are thirty-two men, forty women, twenty-seven boys, and thirty-seven girls, in all one hundred and thirty-six Indians.

JOHN SMITH'S BAND, No. 99.

Reserve.—The reserve of this band is situated about fourteen miles southeast of Prince Albert, the south branch of the Saskatchewan river running through it, and contains thirty-seven square miles. The soil is particularly good, being a rich clay loam, having plenty of hay meadows. These Indians are most fortunate in having such a splendid reserve.

Tribe.—This band consists of half-breeds, Plain Crees, and a few Swampy Crees ; they have the knowledge to earn a living, but some of them are rather lazy.

Population.—This band numbers one hundred and thirty-five souls, consisting of thirty-eight men, thirty-three women, thirty boys, and thirty-four girls.

JAMES SMITH'S AND CUMBERLAND BANDS, NOS. 100 AND 100A.

Reserves.—The reserves of these bands are on the Big Saskatchewan at Fort à la Corne, fifteen miles east of the junction of the north and south branches, and contain ninety-two square miles. A small portion of the soil is sand, but the rest is a rich clay loam interspersed with hay sloughs and lakes. It is a splendid property.

Tribe.—These Indians are Plain and Swampy Crees.

Vital Statistics.—James Smith's band consists of one hundred and seven souls, viz., twenty-four men, twenty-two women, thirty-four boys, and twenty-seven girls.

The population of the Cumberland band is twenty-eight men, thirty-six women, thirty boys, and twenty-six girls, in all one hundred and twenty souls.

The total population of this agency is six hundred and fifteen souls. The number of births was forty-one, and the deaths, thirty-three ; eight Indians are absent.

Health and Sanitary Precautions.—I am glad to say that the general health in this agency has been very good ; we have had no severe epidemics, although other districts joining us have been so afflicted ; the scrofula affliction has been considerably checked in the up-growing Indians due to sanitary precautions, the dying out of the use of Indian medicines and these Indians following the directions of the medical officer.

Resources and Occupations.—A number of the Indians follow farming and the raising of cattle, but they do not do nearly as much as they should. A persistent and constant supervision and help by the respective farmers is necessary to advance them in this. An Indian is a moral coward, still susceptible to shame, and if you keep at him, giving a helping hand now and again, you can get him to do what you want. Again, quite a number are hunters, leading a desultory life, never advancing or acquiring any property about them ; in the summer they dig roots. Now, this 'wolfing' life is wrong, if we can only get them to acquire cattle, and the resource in due course of time from them with a crop of grain would keep the Indians on their reserves occupied and interested in their own affairs, possibly a month off in June would do no harm ; in fact otherwise.

Buildings.—The buildings on most of the reserves have decidedly improved and the Indians now have the inclination (if pushed on) to continue this.

Stock.—The stock is doing better, and it should. The department is generous in giving us all the thorough-bred bulls we require. This, with lots of feed, warmth and care of young stock, will make our cattle the best in the district.

Farming Implements.—We are fairly well supplied with farming implements. They require constant repairing (on the principle that a stitch in time, &c.).

Education.—In this agency we have one industrial school, Emmanuel College at Prince Albert, under the auspices of the Church of England, as also one day school on John Smith's reserve, and one on James Smith's reserve ; there is also at Duck Lake a large boarding school, one hundred in attendance, under the direction of the Roman Catholic Church. The industrial and boarding schools are doing splendid work, keeping up their full number in attendance. The day schools are doing very well in their respective ways, being as it were feeders for the advanced schools.

Religion.—In this agency the larger portion of the Indians are Christians, those at One Arrow's, Okemassis' and Beardy's chiefly attending the Roman Catholic church at Batoche and Duck Lake, while those at John Smith's have a resident clergyman of the Church of England and a very neat church, also those of James Smith's and Cumberland have a very nice church, a resident lay reader of the Church of England and a visiting clergyman. All the Indians are very regular in attending.

Characteristics and Progress.—Many of these Indians make a good living by their farming industries and realize very much what it is to have cattle and grain to sell so as to get ready cash. Quite a number this spring have increased their crop

area. To mention a few, Charles Sutherland has thirty-four acres of wheat, also barley, roots, &c. ; Joseph Gardapie has forty acres of grain ; Thomas Sutherland, thirty acres, and many others through the agency have ten, twenty and twenty-five acres all looking in splendid condition, making them hopeful for the future. Then the Indians have from fifteen to forty head of cattle each. Such men as these have enough property to live from, and above all, to keep them contented and at home on their respective reserves. A number are ex-pupils of the industrial schools, returning here with a good deal of money, acquired from their annuity money that was funded for them, also from their earnings at the schools. Walter Little Pine returned here from the Regina industrial school having over $80 ; out of this he bought a work ox. I gave him one on loan, so he began work at once, putting in a fair crop and also breaking some ten acres of sod. Napoleon Sutherland had on his return from school $128. This he invested in stock and has now ten head. All of these boys will do well if they have some help in the shape of food so as to allow them to acquire property about them. During June and July a number have been summer fallowing and breaking sod.

Temperance and Morality.—On the whole the behaviour of the Indians is very fair, a few of them do get liquor and some of these have been punished as well as those outsiders who procured liquor for them or gave it to them ; with some it is a disease or a weakness they cannot resist.

I took charge of this agency last November, being, as it were, the tail end of the fiscal year. I hope the coming year will see a greater advancement in the Indians' welfare.

I have, &c.,

W. E. JONES,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—EDMONTON AGENCY, . .
STONY PLAIN, July 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the third annual report of my agency, for the year ended June 30, 1901, together with the usual tabular statement and inventory of government property in my charge.

Reserves.—There are five reserves in this agency, viz. : Michel's, No. 132 ; Joseph's, No. 133 ; Paul's, No. 133A ; Alexander's, No. 134 ; Enoch's, No. 135. The total area of the five reserves is one hundred and thirty-four thousand four hundred and twenty acres, about seventy thousand of which are covered with good timber, such as spruce, pine, birch and poplar, a great portion of which is valuable for lumber and building. All of the reserves are well watered, several of the large lakes therein contain an abundance of fish ; while the soil is unsurpassed in any part of the Territories.

MICHEL'S BAND, No. 132.

Tribe.—The Indians of this band belong to the Iroquois tribe and came originally from near Montreal, about one hundred years ago.

Reserve.—This reserve lies in townships 53 and 54, range 27, about twenty-two miles northwest of Edmonton, and comprises forty square miles, or twenty-five thousand four hundred and eighty acres.

Vital Statistics.—The correct census of this band taken at the annuity payments just completed, was ninety-six, consisting of fifteen men, twenty-one women, twenty-nine boys and thirty-one girls. There were three deaths and three births during the year.

Resources and Occupations.—This is the banner farming reserve of the agency, and the Indians make a good living growing grain and cattle-raising; they are practically self-supporting.

Education.—The children of this reserve attend the St. Albert boarding school, which is within fifteen miles of the reserve.

Religion.—All these Indians are Roman Catholics.

Buildings.—Their houses are warm and comfortable, many of them are well furnished.

Joseph's Band, No. 133.

Tribe.—These Indians belong to the Stony tribe.

Reserve.—This reserve lies in townships 55 and 56, range 4 ; it is sixteen miles south of Alexander's reserve. It covers about twenty-three square miles, its exact area being fourteen thousand seven hundred and twenty acres.

Population.—There are one hundred and forty-seven souls in this band, consisting of thirty men, thirty-six women, thirty-nine boys and forty-two girls. There were twelve births among them during the year and no deaths.

Resources and Occupations.—These people live entirely by hunting and fishing, and make a comfortable living, if one may judge from their appearance.

Education.—The day school on the reserve continues open, with a fair attendance, which varies from two to eighteen according to the season of the year.

Religion.—These people are Roman Catholics.

Buildings.—Their houses are warm and comfortable, and are kept clean and tidy.

Paul's Band, No. 133A.

Tribe.—These Indians are Stonies.

Reserve.—This reserve is situated in township 52, ranges 3 and 4 ; it lies sixteen miles south of Joseph's reserve, and twenty-three miles due west of the agency headquarters. It contains about thirty-three square miles, or twenty thousand nine hundred and twenty acres.

Vital Statistics.—This band has a population of one hundred and forty-six, consisting of thirty-two men, forty-two women, forty-five boys and twenty-seven girls. There were nine deaths and seven births during the year.

Resources and Occupations.—As yet the members of this band do not farm, with the exception of raising potatoes, turnips and carrots for their own use ; but I have to report very favourably upon the care they have taken of their cattle, which under the watchful eye and energetic care of Farmer Blewett are increasing into a fair-sized herd. It must be remembered that it is only within the last few years that this band settled on its reserve, and with present indications, I look to it to prove ultimately one of the most successful bands we have.

Education.—The day school has not yet been reopened. Some nine of the children attend the Red Deer industrial school.

Religion.—At the census just taken twenty-five of these people gave their religion as Roman Catholics, one hundred and twenty as Methodists and one as a pagan.

Buildings.—Their houses are warm and comfortable, and are improving gradually in size.

ALEXANDER'S BAND, No. 134.

Tribe.—These are chiefly Crees, although a few claim to be Stonies.

Reserve.—This reserve, which is four miles north of Michel's and forty by road from Edmonton, is situated in townships 55 and 56, and ranges 27, 28 and I, the last-named range being west of the 5th initial meridian. This reserve contains forty-one square miles, or twenty-six thousand two houndred and forty acres.

Population.—There were one hundred and ninety souls in this band on the 19th of this month, consisting of forty-eight men, fifty-nine women, forty-seven boys, and thirty-six girls.

Resources and Occupations.—These people are supposed to be farmers, but at present they are doing worse than any other band in the agency. Although urged to save it, they let one hundred and fifty acres of crop lie without trying to harvest it last fall, because it was beaten down with snow; consequently, these Indians had no seed, and have little, if any, crop, this year. They let a number of their cattle die of starvation, being too lazy to go for and feed the hay they had in stack out on the prairie for them. Some evil influence is at work corrupting their minds, as they used to be good farmers. I have to supply them with a great deal of rations, and they make considerable out of hunting and fishing.

Education.—The children are educated at the St. Albert boarding school.

Religion.—They are all Roman Catholics, with the exception of two Methodists.

Buildings.—The houses and stables are fairly good, but there is much room for improvement.

ENOCH'S BAND, No. 135.

Tribe.—All the Indians of this band belong to the Cree tribe.

Reserve.—This reserve, upon which the agency headquarters are built, lies in township 52, ranges 25 and 26, twelve miles west of Edmonton. It has an area of about forty-four square miles, or, correctly speaking, twenty-seven thousand and sixty acres.

Vital Statistics.—This band has a population of one hundred and twenty-two, consisting of thirty-eight men, forty-two women, twenty-two boys and twenty girls. There were three births and eighteen deaths during the year.

Resources and Occupations.—Farming and cattle-raising are the chief means these Indians have of making a living, but they also make a good deal from the sale of fire-wood and building timber, besides a number of them work at times in town and for outsiders.

Education.—The children from this reserve attend the St. Albert, Hobbema, Red Deer and Regina schools. I have seen none of the large schools mentioned herein, except the one at St. Albert. Of this institution I cannot say too much in regard to the care and comfort given to the children, who number some seventy-six, the thorough cleanliness and order that prevail throughout, which condition is due to the capable and energetic management of that most kind and courteous principal, the Rev. Sister Dandurand, and her staff.

Religion.—At the census-taking, twenty-one gave their religion as Methodists; the rest, one hundred and one, are Roman Catholics. The more I study the Indian the more I am convinced that, except to the better class of half-breed, religion in the undeveloped and dormant condition of their minds is simply a myth, a something that they hope to gain something out of. I know one smart squaw who is a good Methodist, a Roman Catholic and a Presbyterian, and works the three successfully, to the tune of numerous blankets, quilts, clothing and other presents ; and no doubt,

if there were an Anglican clergyman that she knew, she would be a good member of that Church.

Buildings.—The houses are of an inferior kind, only five having shingled roofs, but the Indians have their saw-mill now running, and I hope shortly to see great improvement in their dwellings.

Health and Sanitary Precautions.—If we had no winter to force the Indians from their teepees into, generally speaking, their little log huts, their health would be fairly good, for it is a well-known fact that when they are living practically in the open air, during spring, summer and autumn, their health is very much better. Is it to be wondered at ? Take the white race, and for five months of the year, let them live in a cabin, where huge fires are kept up in the open fireplaces, which, with the heat from them and the perspiration and odours from the unwashed bodies of the Indians, make the atmosphere poisonous. When we consider this evil, coupled with their mode of living, their feast and waste one day, compulsory fast the next, wet feet and often wet clothes, which are slept in, and their immoral lives, can we be astonished that scrofula and consumption, the bane of the Indian, soon appear, and that under the above circumstances, and their utter want of thought in providing for the adaged 'rainy day,' free scope is allowed for these diseases to develop and do their deadly work. All necessary precautions are taken by the employees to carry out sanitary conditions, such as whitewashing, cleaning up and burning refuse, using disinfectants, &c., and vaccination. The use of this latter was very marked in this agency during the past six months, when a disease, called by several of the doctors small-pox, at least a mild form of that scourge, swept over the country, and yet only three families on the same reserve, or thirteen souls, contracted the disease. The Indians are very much afraid of small-pox ; a number of them would never be vaccinated, yet when they heard of the outbreak, they came begging to be operated upon. The influence of the old-time medicine man is rapidly dying, and the Indians are fast becoming willing to be treated by our doctors, and take their medicines. I was, therefore, very pleased when the department appointed Dr. Harrison, of Edmonton, to make regular visits, every two months, to all the reserves. Yet, in some cases, their belief in their medicine men is very great. One case in particular came to my notice this spring. An Indian, who was dying, was persuaded by the doctor to go into the hospital, to be operated upon for scrofula, which operation he was promised would cure him ; he went under it successfully, but two nights afterwards he stole out of the institution and made his way home, to be treated, he said, by his own doctor. He died.

Temperance and Morality.—I am glad to be able to report that during the past year I have found a marked decrease in the use of intoxicants amongst these people, especially in Enoch's band, only one case having come to my notice ; not that I for a minute believe that they are not often quietly used ; and is it to be wondered at, with the evil influences all around them? Regarding their morals, I wish I could report as favourably.

Progress.—I cannot but report favourably of the advancement made on Paul's, Michel's and Enoch's reserves. Although all farmers laboured last fall against great disadvantages, owing to heavy falls of snow in August and September, which beat the grain down flat, yet the farming members of Michel's and Enoch's bands did their best to save their crops, and had fair returns. Neither of these bands was discouraged, and they put in fair-sized areas of oats, wheat, barley and roots again this spring ; one man having in over one hundred acres. I wish I could report as favourably of Alexander's band. As already stated, the members of Joseph's band live by hunting and fishing ; they have proved unworthy to have cattle given to them, as they failed to care for those they had given to them.

Saw-mill.—Enoch's band decided to pull down the old useless forty-foot wheel windmill and move the building to the lake, near the agency headquarter buildings,

and there re-erect it; and purchased from the Waterous Engine Company a twenty-horse-power engine, which work and machinery was all paid for out of their own interest money, the proceeds of the sale of the lands in Passpasschase's reserve. This work was completed late in the spring, yet the band got out some five hundred logs, which upon being sawn turned out some twenty thousand feet of lumber. The shingle-mill has not yet been used. Besides the sawing, five hundred bushels of wheat has been gristed, which made one hundred and ninety-seven sacks of flour of good quality. The band hope shortly to be able to put in a planer and machinery for making flooring and drop-siding. To help to pay the wages of Mr. Thomas McGee, who also runs the Saddle Lake agency grist-mill, every fifth log is taken, the lumber from which will go towards making improvements on the several reserves. The band is to be congratulated on its enterprise, from which before long I hope to see, as one result, a much better class of houses erected than the huts the majority of the Indians live in.

Fence.—The next large work that the members of Enoch's band are figuring on, to be paid for by themselves, is to fence the whole of their reserve, which will take seventy-five miles of wire ; this work we hope to have completed before winter.

Stock.—The cattle on the several reserves, which number five hundred and forty-five, with a few exceptions, were well wintered, considering the very wet haying season we had last year ; but I regret to say that these people in many instances still follow a very evil practice of killing their calves, especially the males. It is this habit that prevents them from seeing any profit from the keeping of cattle, and thus discourages them. The Indians of Enoch's band have purchased for themselves, out of their interest money, seven heavy mares and a Cleveland bay stallion, for breeding purposes. This is another step made by this band toward success.

Agency Buildings, &c.—The Indians built a blacksmith's shop, which I had fitted up with tools, &c., a place that fills a long-felt want and is very handy and saving for these people, as broken articles are now repaired that in the past would have been cast aside as useless. Dio Callihoo, an Indian boy who learned his trade at Dunbow industrial school, acts as blacksmith. I had also the office and the interpreter's house willowed and lime-plastered outside, which now makes them warm and comfortable ; besides this, the Indians cut during the winter some eight thousand rails, with which I had them fence in about one hundred and fifty acres for a paddock for the agency horses and cows, another long-felt want, all of the above work being done for their rations.

General Remarks.

Last summer was a remarkably wet one, followed by a very mild and short winter, which no doubt accounts for the large number of non-infectious cases of sickness that were on all the reserves.

Half-breed scrip was given out in this district last year by Commissioner J. A. J. McKenna, of this department, and caused a good deal of excitement, unrest and amusement, the last by numerous pure-bred Indians going back for generations to try and prove themselves half-breeds.

I have, &c.,

JAS. GIBBONS,
Indian Agent.

NORTHWEST TERRITORIES,
ASSINIBOIA,
QU'APPELLE AGENCY, August 28, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on this agency, together with accompanying statistical statement and inventory of government property for the year ended June 30, 1901.

Since writing my last annual report, the File Hills and Muscowpetung agencies have been amalgamated, and the new agency, which is now known as the 'Qu'Appelle agency,' consists of eight reserves, over which I assumed charge on April 1, of this year.

PIAPOT'S BAND, No. 75.

Reserve.—The reserve belonging to this band comprises township 20 and a portion of 21, in range 18, west of 2nd meridian, and contains an area of fifty-eight square miles.

The reserve is not particularly adapted for grain-growing, the soil on the uplands being very light, but it is noted for the abundance of hay that grows in the bed of the valley along the Qu'Appelle river, which makes it an excellent reserve for stock-raising.

Tribe.—The Indians of this band, with one or two exceptions, belong to the Cree tribe.

Vital Statistics.—The population is one hundred and fifty-six, consisting of forty-four men, fifty-five women, thirty-four boys and twenty-three girls. There were four deaths and seven births during the year. The decrease in the population since last year is caused by Indians leaving the reserve and living in the United States.

Health and Sanitary Precautions.—The general health of the Indians of this band for the year has been fairly good, considering that quite a few of them are afflicted with pulmonary and scrofulous diseases. An epidemic of whooping-cough broke out among the children early in the spring, and Dr. Kalbfleisch gave them medical attention. The sanitary regulations of the department have been carried out as far as possible. Many of the Indians were revaccinated this spring.

Resources.—The Indians of this band put up quite a quantity of hay every year, for which they always find a ready market in Regina and elsewhere. They also sell a large quantity of fire-wood, but the supply of the latter is rapidly diminishing. Owing to the Indians being able to make a living out of the sale of hay and fire-wood, they have not in the past gone into cattle-raising and farming very extensively; however, they realize that the wood supply will soon give out and that they will have to depend more on mixed farming in order to earn a livelihood. The land on this reserve is light, and in a dry season it is difficult to raise grain, but in a season like the present one the soil produces a heavy crop. These Indians have a splendid crop this year, some one hundred and thirty acres, which will provide them with flour for the coming winter as well as a quantity of wheat for sale. Four or five of the Indians have purchased ploughs for themselves and are now preparing quite a bit of land for next year. I am satisfied that the encouraging crop of this year will assist me greatly in working these Indians up to go more extensively into farming.

Buildings, Stock and Implements.—The Indian buildings on this reserve are of an inferior class, which is largely due to the fact that the Indians are unable to procure suitable building timber on the reserve. The stables are small, but warm.

The cattle on the reserve, which are of a very good quality, are increasing slowly. The Indians own about two hundred and forty-three head of ponies, many of which are of little, if any value, being altogether too small for work.

Education.—A few children from this reserve attend the Regina and Qu'Appelle industrial schools. The Indians here are chiefly pagan, and they have in the past always shown great opposition to having their children educated. During the last three months, however, some four or five children have been placed in schools, and I am hoping that the strong opposition shown in the past is being overcome.

Religion.—As before stated, the majority of these Indians are pagans. The reserve is visited periodically by missionaries of the different denominations.

Temperance and Morality.—Since taking charge of this band, I have had no reason to suspect any of the Indians of being intoxicated, and no cases of immorality have come to my notice.

Muscowpetung's Band, No. 80.

Reserve.—This reserve is situated on the Qu'Appelle river, between Piapot's and Pasqua's reserves, and contains some fifty-eight square miles. What is known as the 'valley section' of the reserve is very valuable for the hay it produces every year, while the uplands are well adapted for farming. There is very little timber on the reserve.

Tribe.—The Indians of this band belong to the Saulteaux tribe.

Vital Statistics.—This band consists of twenty-three men, thirty-two women, twelve boys and fifteen girls, making a total of eighty-two. There was one birth and two deaths during the year.

Health.—The general health of the Indians in this band has been fair throughout the year, scrofula and pulmonary diseases being the main cause of what sickness they had.

Resources and Occupations.—The resources and occupations of these Indians are about the same as those of Piapot's band.

Buildings, Stock and Implements.—The houses and stables on this reserve are much the same as those on Piapot's reserve, the same difficulty in obtaining suitable building timber existing. The Indians of this band have a good herd of cattle, and as they have an abundance of hay and water close at hand, there is no reason why their herds should not increase. These Indians are well supplied with wagons, mowers and rakes, which were purchased with their own funds.

Education.—Few children from this reserve are attending school. The opposition to schools is very strong.

Religion.—Almost all these Indians are pagans.

Progress.—These Indians are not good workers, and any work that has been done in the past has required a great deal of urging on the part of those in charge. They have this year about sixty-five acres of wheat, twenty-four acres of oats, and three acres of roots. I expect they will have three thousand five hundred bushels of grain, which will be ample to supply them for the coming winter.

Temperance and Morality.—These Indians, from all I can observe, are temperate, and fairly moral in their habits.

Pasqua's Band, No. 79.

Reserve.—This reserve lies about six miles west of the village of Fort Qu'Appelle, and has as its northern boundary the upper Qu'Appelle lake. It extends back from the lake about eight miles, and covers an area of sixty square miles. As in the case of Piapot's and Muscowpetung's, part of the reserve lies in the Qu'Appelle valley and the rest on the uplands. The reserve contains more timber than either Piapot's or Muscowpetung's, some of the timber being of a good size and suitable for building purposes. The land on the south and east of the reserve is open prairie and the soil is of the very best for grain-growing.

Tribe.—The Indians of the band belong to the Saulteaux tribe with a slight admixture of Cree.

Vital Statistics.—The population is one hundred and thirty-four souls, made up as follows : thirty-six men, sixty women, sixteen boys and twenty-two girls. There were three births and seven deaths during the year.

Health and Sanitary Precautions.—The general health of the Indians of this band throughout the year has been fairly good, a slight epidemic of whooping-cough broke out among the children during the early part of the spring. As a rule the Indians of this reserve are far more cleanly in their mode of living than either of the two reserves above referred to. The women generally are cleaner and more industrious, in fact, many of their houses will compare favourably as to cleanliness with those of the average white farmers' wives, and I have always noticed with pleasure the particularly neat and clean appearance of their children. The sanitary regulations of the department are always carried out.

Resources and Occupations.—These Indians are principally engaged in mixed farming, at which they have been fairly successful, in fact, this band has been self-sustaining for a number of years. Some of the more advanced Indians have from twenty to sixty acres of crop this year, and the present outlook is very bright for them. During the past summer they have broken over one hundred and fifty acres of new land and ploughed about one hundred and forty acres of summer-fallow, and the increase in the area for next year will be considerable. Very little hay grows on this reserve, and as a consequence, the Indians cannot have a large herd of cattle. However, some of them have from eight to ten head each, and straw is used to help out the feed. A few of the more advanced Indians on this reserve possess good work horses, and the improvement in the class of horses generally on this reserve is noticeable each year. These Indians possess very few ponies compared with their neighbours on Muscowpetung's and Piapot's reserves.

Buildings, Stock and Implements.—The Indians on this reserve are divided into two groups, viz., those living in the valley and those who have removed therefrom and now reside on their different farms on the table-land. A few years ago most of the Indians lived in the valley, miles away from their fields ; but many of them now see the disadvantage they were labouring under in living so far away from their work, and each spring new houses are being built on their different farms on the bench, and I feel that in a very short time all the Indians on this reserve will be residing on their own farms and in good houses. Most of the houses built on the bench are of a superior class to those in the valley, being in most cases one and a half stories high, with upstairs, with shingle or thatched roofs, in fact, they are quite comfortable. The stables throughout this reserve are good and they are kept in good repair. These Indians are well equipped with farm machinery, all of which has been purchased with their own earnings, and this spring a number of new ploughs and disc-harrows were added to their plant.

Education.—The Indians of this reserve are not opposed to sending their children to school, in fact all children of school age are attending either the Qu'Appelle or Regina industrial schools.

Religion.—Most of the Indians of this band belong to the Roman Catholic Church, which has a very neat stone building on the northeast quarter of the reserve. Services are conducted regularly by a priest supplied from the Roman Catholic mission at Lebret. The Presbyterians have a nice little stone church on the reserve, but there has been no service held in it for some time.

Characteristics and Progress.—The Indians of this band are progressive, but, as in all communities, there are a few who are opposed to work and live by sponging on others, but I am pleased to say that this element is dying out on this reserve, and if a man does not work, he fares badly.

There has been no dancing on this reserve for the past five months, and I have used every effort in my power to discourage this round dance which the Indians often carry to excess. The dancing-house which they built a few years ago has been torn down, and I am satisfied that another will not be built.

Standing Buffalo's Band.

Reserve.—The reserve occupied by these Indians covers an area of seven square miles, lying in townships 21 and 22, in range 14, west of 2nd meridian. The soil is very light for grain-growing, except when there is plenty of moisture, but root-crops grow exceptionally well. The reserve is deficient of hay, and what is required for stock is procured under permit on Dominion lands and from Muscowpetung's reserve. Wood is also very scarce and the Indians have to go off the reserve to secure a supply for their own use.

Tribe.—These Indians are known as the Sioux, or Dakotahs, and were formerly resident in Minnesota, in the United States.

Population.—The population is one hundred and seventy-two, composed of seventy-nine males and ninety-three females.

Health and Sanitary Precautions.—These Indians are remarkably healthy. The sanitary regulations of the department are well observed. The houses throughout the reserve are exceedingly clean.

Resources and Occupations.—The Indians of this reserve have to depend entirely on farming and working out for a living, as they have no wood or hay to sell and not a sufficient quantity of the latter to feed many cattle. However, with these disadvantages they are not behind the Indians of Pasqua's reserve, as many of them are good workers and earn fair wages working for farmers, besides having small farms and gardens of their own at home, which always produce sufficient grain and roots for their own consumption. The members of this band are entirely self-supporting and have worked well this year to enlarge their fields by breaking about one hundred acres of new land.

Buildings, Stock and Implements.—The buildings on this reserve are of a fair class and are kept in good repair.

The cattle are of a very fine class.

The implements are well kept and the Indians have a good supply of them, which were purchased with their own earnings.

Religion.—The most of the Indians of this reserve profess the Roman Catholic faith.

Education.—Most of the children of this reserve of school age are attending the Qu'Appelle industrial school.

Temperance and Morality.—Since taking charge of this band only one case of intoxication has come to my notice.

I have heard nothing of immorality among the Indians.

File Hill Indians.

These Indians occupy four reserves, situated about twenty miles northeast of the village of Fort Qu'Appelle.

Tribe.—The Indians of the four bands belong to the Cree tribe.

Vital Statistics.—There were seven births and thirteen deaths during the year.

Health and Sanitary Precautions.—I am pleased to report that I have noticed a great improvement in the general health of these Indians during the past twelve months. The sanitary regulations of the department are well observed, particularly on Okanees, Little Black Bear and Peepeekeesis reserves.

Resources and Occupations.—The natural resources of these reserves are hay and wood, of which there is a large quantity. The principal occupation of these Indians is stock-raising and mixed farming. During the year they sold quite a number of cattle to buyers as well as having a sufficient number to kill for beef for their own consumption during the past winter. This spring a large acreage was broken up by the Indians of Okanees, Peepeekeesis and Black Bear's bands, and the area for crop next year will be increased considerably over last year. In addition to putting up hay for their own cattle, the Indians always put up a large quantity for sale, and the prices obtained for this hay during the winter amounts to considerable. Last spring the Indans of Star Blanket's band sold some hundreds of dollars' worth of senega-root, and with the proceeds purchased sufficient provisions, &c., to carry them through the summer. These Indians have worked hard during the past twelve months, they have been constantly employed and as a result of their labours they have a large area under crop which promises an enormous yield. Several of the fields were fenced with wire this spring, which was purchased with proceeds of grain sold last fall.

Buildings, Stock and Implements.—The agency buildings at File Hills are in good repair. Those of the Indians are in most cases well kept and whitewashed regularly in spring and fall.

The cattle are improving in quality each year. Last year two thorough-bred shorthorn bulls were added to the herd. The Indians will have more cattle to dispose of this year to outside buyers than any of the previous years. This, together with what grain they will have for sale, will place them in a very good condition.

During the year these Indians purchased a new self-binder, a new seeder, six new wagons, and seven new ploughs, all of which were paid for out of last year's crop. They are well equipped with farm machinery.

Education.—All the children of school age on the four reserves here are attending school. The File Hills boarding school, under the auspices of the Presbyterian Church, is in charge of the Rev. Mr. Farrar, who is painstaking in the discharge of his duties, and good work is being done in this institution. A large number of children from these reserves attend the Qu'Appelle industrial school.

Temperance and Morality.—I am pleased to report that I have had few liquor cases during the past year. No cases of immorality have come to my notice.

General Remarks.

During the year, four pupils (boys) were discharged from industrial schools. These boys have set to work in earnest, they have already broken one hundred and twenty acres of new land, which will be ready for crop next spring. The ex-pupils residing on the reserves are doing well.

On the whole, the Indians here have had a very prosperous year, and I am looking for further advancement next year.

Our third annual Indian fair took place on June 27, and the number of entries was considerably increased over last year. Quite a few articles were exhibited by the Indians whose reserves were added to the agency.

I have, &c.,

W. M. GRAHAM,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—HOBBEMA AGENCY,
HOLLBROKE, July 5, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report, together with statistical statement and inventory of all government property under my charge, for the year ended June 30, 1901.

Agency Headquarters.—The headquarters of this agency are situated on Samson's reserve, near the Battle river.

The following reserves are comprised within this agency :—No. 137, Ermineskin's, thirty-nine thousand three hundred and sixty acres, situated in the Bear or Peace hills ; No. 138, Samson's, thirty-nine thousand three hundred and sixty acres, situated on the Battle river ; No. 140, Louis Bull's, in the northwestern part of Ermineskin's reserve, no subdividing line having as yet been run between them ; No. —, Montana, or Little Bear's band, twenty thousand one hundred and sixty acres ; this was originally the Bobtail's reserve, on the south side of Battle river, near Ponoka station, on the Calgary and Edmonton railway.

There is also a fishing reserve at Pigeon lake containing four thousand nine hundred and eighty acres.

Tribe.—The Indians of this agency are Crees, with the exception of a few Stonies, who have joined them by marriage.

Vital Statistics.—The population consists of one hundred and forty-three men, one hundred and seventy-one women, and three hundred and three children, or a total of six hundred and seventeen souls.

Health and Sanitary Precautions.—The health of the various bands has not been altogether satisfactory; there are many old cases of scrofula and consumption, some of whom have died during the year; this spring brought us that dreadful disease, small-pox, both on the reserves and at Pigeon lake, amongst our Indians fishing there; all the cases were mild and no deaths occurred. The medical officer visited the reserves and fishing lake, and vaccinated men, women and children. The Indians are now living in tents and teepees, and at the present time are in fairly good health. Spring and fine weather seem to be benficial to their health, after living close in houses all winter. Premises are clean, and all refuse removed and burnt. Houses are whitewashed in the fall, ready for winter occupation.

Resources and Occupations.—The principal occupations of the Indians are general farming, cattle-raising, hunting, fishing, and a little freighting. A few houses and stables have been built during the year to replace old ones pulled down.

Cattle are now in splendid condition and feed excellent. The loss this spring was rather heavy, which I cannot account for, as they had sufficient feed during the winter, but as soon as they commenced to feed on grass they dropped off. At the

June round-up the stock numbered nine hundred and twenty-eight head, viz. :— twenty-four bulls, twenty-eight oxen, two hundred and ninety-two cows, two hundred and thirty-three steers, two hundred and thirty-four heifers, and one hundred and seventeen calves, with several cows still to calve.

Education.—There are one hundred and thirty-two children of school age in this agency. The Roman Catholic boarding school on Ermineskin's reserve has forty-eight pupils, who are making excellent progress, under the able management of the sister superior and her assistants, who are much appreciated by the parents of the children. The buildings are kept clean and neat. There were a few mild cases of small-pox this spring, but all recovered, and the school at present is in a very healthy condition.

The day school on Samson's reserve, under the auspices of the Methodist Church, is not appreciated by the parents as it should be, the attendance on the whole being much below what it ought to be. The parents travel about, and in winter a great many go to Fishing lake to earn a little by fishing, taking their families.

Religion.—The Indians on Samson's and Louis Bull's reserves are principally Methodists. The members of Ermineskin's band are almost all Catholics, while those of the Montana band, with three or four exceptions, are pagans.

Three buildings are used for divine service, which are regularly held and fairly well attended.

Samson's and Louis Bull's school-houses were properly repaired last fall, and are now very comfortable in every respect.

Characteristics and Progress.—The Indians, with a few exceptions, are law-abiding and fairly industrious ; some are certainly improving.

Temperance and Morality.—The Indians are temperate, and few cases of immorality come to my notice.

General Remarks.—The grain crop last year would have been very good had it not been for the heavy snow storm in September last, which caused a good deal of havoc. However, some of the working Indians had sufficient wheat to provide themselves with flour until spring. They also supplied the beef contract for destitute Indians, thirty-two thousand four hundred and seventeen pounds, besides having killed about twenty-five thousand pounds of beef for the use of their own families.

The money received for beef was judiciously expended in the purchase of wagons, mowers, bob-sleighs, clothing and provisions.

The grist-mill was kept running well into January, and again this spring, grinding Indians' flour. The river this spring, on account of so much rain, has been so extraordinarily high that we cannot saw lumber yet, but trust to be able to do so before long.

About this agency there is a good deal of unforeseen work repairing the banks of the reservoir and waste-water gates, which continually need attending to ; also the trails on the reserves. All this work is done by Indian labour, under the supervision of myself and farmers.

There has been plenty of rain, and the crop prospects at the present time are bright.

In conclusion, I beg to state I have received great assistance from the members of the staff, who have performed their duties in a most cheerful and satisfactory manner.

I have, &c.,

W. S. GRANT,
Indian Agent.

NORTHWEST TERRITORIES,
EAST ASSINIBOIA—MOOSE MOUNTAIN AGENCY,
CANNINGTON MANOR, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901, together with statistical statement, and inventory of government property under my charge.

Since my last report the three bands in this agency, namely, Pheasant Rump, No. 68, Striped Blanket, No. 69, and White Bear's, No. 70, have been amalgamated, and all are now living on the reserve of the last-named band, the reserves that were formerly occupied by Pheasant Rump and Striped Blanket's bands having been surrendered to the department in March last, when the Indian Commissioner visited this agency. I will therefore include all three bands in my report on White Bear's reserve.

Reserve.—White Bear's reserve No. 70, is situated in the southeast part of Moose mountain, with an area of thirty thousand seven hundred and twenty acres, of which a large portion is covered with poplar woods and lakes, in some of which pike and pickerel are caught, the southeastern part being more level and having a sufficient quantity of arable land, and many pretty bluffs of poplar and willow, and small lakes.

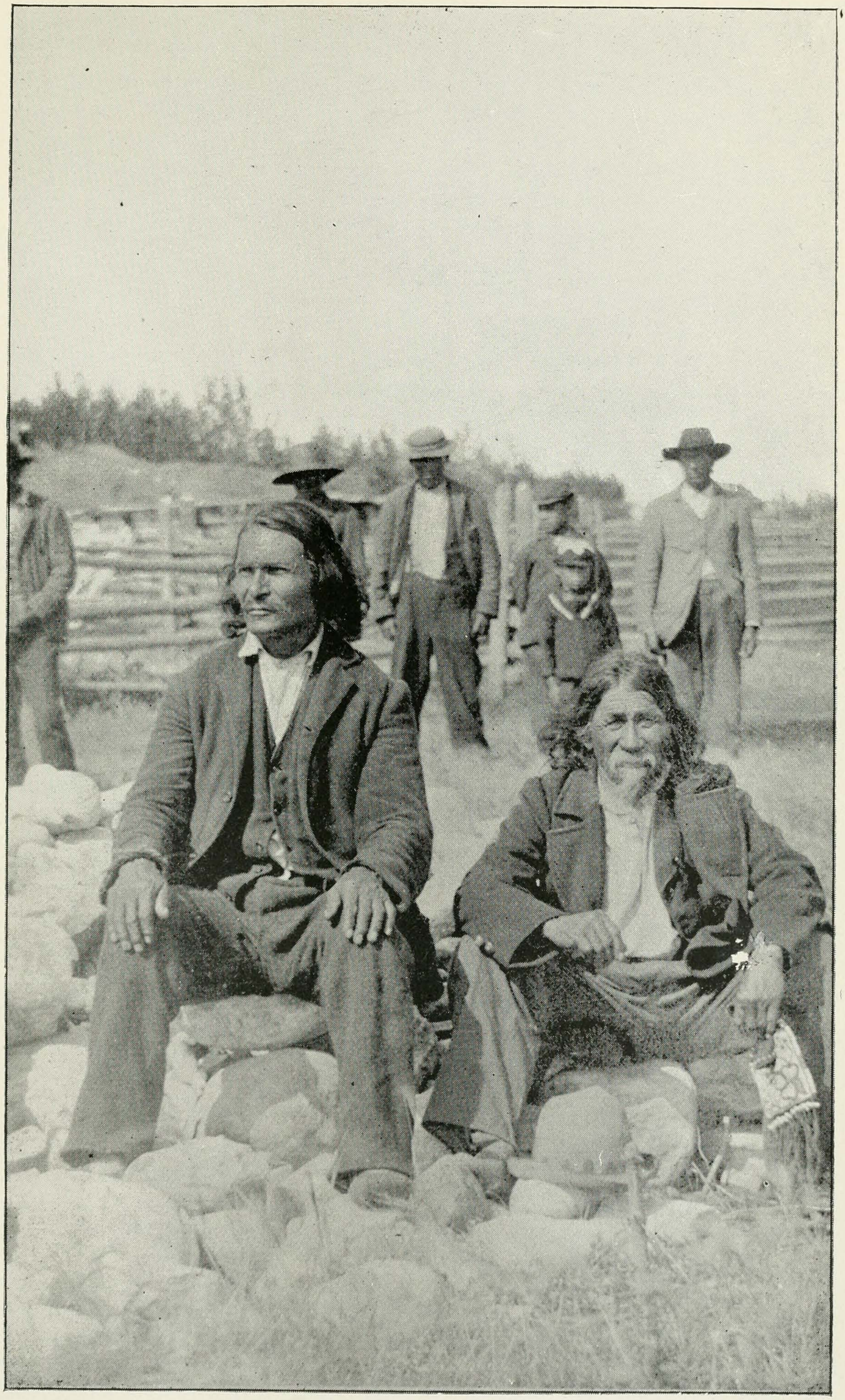
Vital Statistics.—The population of this agency is at present one hundred and ninety-four, being an increase of one since my last annual report.

Tribe.—Three tribes are represented in the agency, namely, Crees, Saulteaux and Assiniboines.

Health.—The health of these Indians on the whole has been fairly good. The sanitary regulations laid down by the department are attended to, and the homes of the Indians are in most cases kept clean and tidy. They give more attention to cleanliness, both of their persons and premises, than formerly, and appear to realize the necessity of cleanliness in their homes, which no doubt assists to ward off disease of a contagious nature. At the same time there is much room for improvement. I am glad to state that no epidemic visited these Indians during the year. Dr. J. G. Hardy, of Cannington Manor, is the medical officer for the agency, and he spares no pains and trouble to relieve those who are suffering. All who required vaccination were operated upon by him during the past year, and though small-pox has been in the vicinity of the reserve for some time, there have so far been no cases among the Indians, and the doctor informs me that the Indians are in a much better position with regard to small-pox than the majority of the white settlers, most of whom are not, or were not, until lately, vaccinated. I do not think two per cent of the Indians in this agency remain unvaccinated at the present time.

Resources and Occupations.—The Indians depend a good deal for their living in the winter upon the sale of dry fire-wood, logs and poles cut from timber killed by fire, which has swept the reserve at different times in past years.

Cattle-raising and mixed farming is the principal occupation of these Indians. They also derive much of their support from the tanning of cow robes for the white settlers. During the berry season the women gather and sell large quantities of wild fruit, and the fish in White Bear's lake form an additional food supply. Some fur is caught during the winter, but this is not of much importance now.



LOUIS O'SOUP AND THE "GAMBLER," TWO WELL-KNOWN INDIANS OF THE NORTHWEST

Crops.—The crop of grain last year was a failure on the reserve, as well as with the majority of the white settlers in the vicinity of the reserve.

Stock.—Our cattle are doing well, and are in good condition ; the losses were few during the past winter. The number of calves this season has been above the average.

Education.—There is no day school on the reserve, and it is difficult to get the parents to send their children to any of the industrial schools. There are thirty-one children of school age in the agency; of these nine are attending the industrial school at Qu'Appelle.

When here last March, the Honourable the Indian Commissioner promised these Indians a day school on the reserve, and all the Indians are looking forward to being able to get their children educated without sending them away from home.

Farming Implements.—These Indians are well supplied with all the necessary farming implements. Mr. Murison, who is getting to be a capable blacksmith, keeps the tools in good repair. Binders were stored in the implement-shed during the winter.

Religion.—The Presbyterian Church has a mission on the reserve conducted by Mr. F. T. Dodds. The Indians are always respectful to the missionary, and appear glad to have him visit them in their homes, where he reads to them out of the Bible in their own language; but most of the Indians are pagans, and do not even pretend otherwise, and attend all the different Indian dances that take place on the reserve.

Buildings.—Every year there are old houses pulled down and new ones of a better quality built in their places. After the death of the old chief, White Bear, last year, all the Indians moved to another part of the reserve, away from the place where the chief died, and put up sixteen new dwelling-houses, and as many stables. Most of the houses are of a better class than the ones they formerly occupied, though there is still much room for improvement. The crop being so poor last fall, the Indians were unable to purchase lumber for floors for their houses, and many of them had to go without in consequence. Should our crop be good this fall, there will not be many of the houses on the reserve without a lumber floor.

Characteristics and Progress.—The Indians in this agency are improving in many ways, as, for instance, much of the money they earn, and derive from the sale of cattle, is spent in the purchase of wagons, mowers, rakes and other articles of use ; clothing, lumber and shingles are also purchased and many articles which increase their household comfort. As a rule these Indians are a very law-abiding class of people. There was only one case during the year where the law had to step in and take away one of our young men for a term in jail at Regina, and I regret to say that this man was our only graduate from the Regina industrial school.

Some of these Indians who had nothing a few years ago have now a considerable number of cattle and horses and other personal property in the shape of wagons, sleighs, mowers and such like. The majority of these Indians are less indolent than they were, and they find that they must work on their reserve if they want to get along, for the hunting of fur-bearing animals is a thing of the past in this agency.

The Indians are becoming better off each year, and are making steady progress in farming by increasing their fields and herds of cattle.

I can say the Indians of this agency, as a whole, are industrious and law-abiding, and many are becoming better off each year, and had last season's crop not been a failure, we should not have required much assistance from the department this spring.

Temperance and Morality.—I have no trouble in preventing the introduction of intoxicants among these Indians, and have had to deal with only one case of drunkenness in four years. The Indians in the agency are moral, so far as white men are concerned, but I am afraid among themselves they are not so strictly virtuous as the department would wish.

General Remarks.—The crops were all well put in this spring, and the weather has been most favourable, so that the prospects are bright for a bountiful harvest. The agency was visited in March last by the Indian Commissioner, and during this visit the Indians of the western reserves surrendered their lands to the government and all are now living on the eastern or White Bear's reserve. All the Indians seem to get along without any friction, and all have worked well, and every available bit of land has been put under crop.

No attempt was made to hold a sun dance last year, nor has such a thing been even mentioned this season. This I consider a great stride towards civilization.

The earnings this year, apart from the sale of cattle, were much above the average, and though, as I said before, our crops were a failure, the Indians did not suffer from want of either food or clothing. I trust that each year will show greater advancement towards self-support on the part of these Indians, and now that they are all together on one reserve the progress should be marked.

I have, &c.,

H. R. HALPIN,

Farmer in Charge.

NORTHWEST TERRITORIES,
SASKATCHEWAN—ONION LAKE AGENCY,
ONION LAKE, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the affairs of this agency for the fiscal year ended June 30, 1901, also a statistical statement and an inventory of the government property under my charge.

The following are the reserves included in this agency : Seekaskootch, No. 119 ; Weemistikooseahwasis, No. 120 ; Ooneepowhayo, No. 121 ; Puskeeahkeewein, No. 122 ; Keeheewin, No. 123 ; Chipewyan, No. 124.

SEEKASKOOTCH BAND, No. 119.

Reserve.—This reserve is situated to the north of Fort Pitt and contains an area of thirty-eight thousand four hundred acres. The northern portion is hilly and sandy, interspersed with poplar and pine. The centre has the appearance of being an old lake bottom and contains several good hay marshes. The soil varies from sand to loam, and poplar groves are numerous. To the south hay is more plentiful and the grazing is good.

Vital Statistics.—Ten births and thirteen deaths occurred on this reserve during the year, and the population is two hundred and sixty-nine, made up as follows : sixty-six men, seventy-nine women, and one hundred and twenty-four children.

WEEMISTIKOOSEAHWASIS BAND, No. 120.

Reserve.—This reserve abuts Seekaskootch reserve on the western side, and contains an area of fourteen thousand and eighty acres. The surface is rolling, the soil is light, there are a number of poplar groves and in wet seasons hay is plentiful.

Vital Statistics.—There were three births and seven deaths, making the population one hundred and eight, consisting of twenty-five men, thirty-two women and fifty-one children.

Ooneepowhayo's Band, No. 121.

Reserve.—This reserve is situated round a spur of Frog lake and forms the southern and a portion of the east and west boundaries of the lake. It contains an area of twenty-one thousand one hundred and twenty acres. The southern portion is hilly and partially wooded with poplar and some spruce ; towards the north it is not so hilly and not so thickly wooded. The soil is sandy loam and hay is plentiful.

Vital Statistics.—Four births and one death occurred among the Indians of this reserve, and the population stands at eighty-six, made up as follows : twenty-four men, twenty-seven women, and thirty-five children.

Puskeeahkeewein's Band, No. 122.

Reserve.—This reserve forms the northern boundary and a portion of the western boundary of Ooneepowhayo's reserve, also a part of the western boundary of Frog lake. It contains an area of twenty-five thousand six hundred acres. The surface is hilly, studded with poplar groves. Hay is not plentiful.

Vital Statistics.—One birth occurred, increasing the population to twenty-seven, which is made up of four men, ten women and thirteen children.

Keeheewin's Band, No. 123.

Reserve.—This reserve is situated to the northwest of Frog lake, and contains an area of seventeen thousand nine hundred and twenty acres. It is wooded with poplar and spruce. Hay is plentiful and the soil is rich loam. A large alkaline lake forms a part of the northern boundary.

Vital Statistics.—Eight births and five deaths occurred in this band, and the population is one hundred and nineteen, made up of twenty-nine men, thirty-four women, and fifty-six children.

The most industrious of the preceding five bands have been collected on Seekaskootch and Weemistikooseahwasis reserves, which adjoin one another, and on the former of which the agency headquarters is situated. The rest of the Indians earn their living hunting, fishing, and working for traders and settlers. All these Indians are treated as one band under the head of Seekaskootch band, No. 119.

Seekaskootch Band, No. 119.

Tribe.—These Indians all belong to the Cree nation.

Health and Sanitary Precautions.—The health of the Indians has, generally speaking, been good. A very mild form of small-pox, which prevailed throughout the country west of this, attacked three families at Frog Lake and a number of children in the vicinity of the agency headquarters. Quarantine was established and, principally through the Indians obeying the rules remarkably well and paying stricter attention to cleanliness, the spread of the disease was checked. A number of Indians have been successfully vaccinated, and this precaution will again be attended to by the health officer who is at present residing in the district.

Resources and Occupations.—Stock-raising is the industry to which the attention of these Indians is principally directed, the district being more favourable for this pursuit than for farming. However, they were unusually successful with the harvest of a small acreage of oats and barley, and the yield of about seven acres of potatoes.

In addition to about $2,300 derived from the sale of cattle and beef and about $380 from the sale of grain, these Indians earned a considerable amount transporting sup-

plies for the Hudson's Bay Company, the respective missions and other residents, also for the department. They are very willing to work when they can earn a reasonable remuneration. The women of the band are industrious, their chief employment beyond their ordinary house or camp work being tanning hides, making moccasins, mending clothes and in many cases making clothes. In the proper season they earn a little by the sale of wild fruit, and they also receive employment, washing, scrubbing and such work from the residents.

Buildings.—The houses are built of logs, small but warm and comfortable. They are remudded and whitewashed every fall. The majority of them have stoves as well as the characteristic mud fireplace and chimney.

Stock.—The natural increase has been satisfactory. Proper attention is paid to feeding and watering in winter, and in summer during the fly season smudges are kept burning. The cattle are of a good breed and sell readily.

Implements.—Two mowers, two horse-rakes and three wagons have been purchased out of Indian earnings. Some of the old implements are nearly worn out and frequently require repairing.

Education.—There are two boarding schools close to the agency headquarters—one under the auspices of the Roman Catholic Church and the other under that of the Church of England. In many instances the parents take a proper interest in the education of their children and are willing to leave them at school for the full term ; others again wish to remove their children, not being able to comprehend the advantages of education. The progress made by the more intelligent pupils is very satisfactory, but others are very slow to learn.

Religion.—There are two churches on the reserve—one Roman Catholic, the other Church of England. Services are held every Sunday, and at times are well attended by the Indians, but beyond attending service I do not know that they take much interest in religious affairs.

Characteristics and Progress.—There are but few indolent Indians to be found in this band : the majority are active and try to improve their condition and are gradually succeeding ; none, I can say, are becoming poorer. They spend their treaty money judiciously and have almost entirely adopted the style of dress of white people, which, however, they sometimes decorate with bead-work and other trimmings of their own devices. Some of the young men have their hair cut short, but the majority pride themselves on their long hair, not unkempt as formerly, but combed and neatly plaited.

Temperance and Morality.—Owing to the situation of the reserves, the temptation to use intoxicants is not thrown in the Indians' way, so that no cases of intemperance have come to my notice. Morality cannot be so favourably reported upon, but otherwise their behaviour is good.

Chipewyan Band No. 124.

Reserve.—The district occupied by these Indians is divided by the Beaver river and extends to the shores of Cold lake. No reserve has yet been surveyed.

Tribe.—All the Indians of this band are Chipewyans.

Vital Statistics.—Fourteen births and six deaths have been recorded in this band and the population is two hundred and thirty-nine, composed of forty-five men, seventy-four women and one hundred and twenty children.

Health and Sanitary Precautions.—The general health of the band has been good, but many suffer from sore eyes, and a number are blind. The epidemic already referred to did not attack any of these Indians. However, the precaution of vaccinating was taken with them as well as with the Crees, and will again be attended to at the coming treaty payments.

Resources and Occupations.—The Chipewyans make a fairly good living, hunting and fishing, and they earn a little, working for traders and the Roman Catholic mission, which has been established there for many years. Cattle-raising is followed to no small extent, but the stock is not of a particularly good class. Potatoes and other vegetables are successfully grown, but grain-raising is rarely attempted. The assistance necessary to be given these Indians is so small that they may be called self-supporting.

Buildings.—The houses are built of logs and are larger than the generality of Indian houses. The roofs are nearly all gable, and good workmanship is displayed in the buildings.

Farm Implements.—The Indians have sufficient for their requirements. Four mowers, three horse-rakes and two wagons were purchased by them during the year. They also have some old mowers and rakes which are almost worn out.

Education.—There are no schools in the district, but eleven of the children attend the Roman Catholic boarding school at Onion lake, about sixty miles south ; but the parents are not too ready to be separated from their children by such a distance. The pupils are moderately intelligent.

Religion.—All the Indians in this Chipewyan settlement belong to the Roman Catholic Church and attend service very regularly.

Characteristics and Progress.—These people live happily and peacefully together, and only the aged in the band, when the younger ones are off hunting, find it hard to make a living ; it is for them the occasional assistance is given by the department.

The hunt has been more successful than for several years past.

Temperance and Morality.—I have no reason to believe that any of the Chipewyan band have a weakness for alcoholic liquors, and I understand they are fairly moral in their habits.

General Remarks.—The government herd numbers six hundred and twelve head, with a number of cows still to calve. The respective ranches are situated at Long lake and Long swamp, where hay is plentiful. However, the wet season of 1900 and cold weather setting in so early retarded hay-making, but enough was secured to bring the cattle successfully through the winter, and in spring they returned to their ranges in good condition. The rains of this season have flooded the swamps at the winter ranches to such an extent that it is very possible that hay will have to be found elsewhere this year.

The beef supplied to the working and destitute Indians is derived from this herd, and thirty-nine head of cattle were sold for $1,064.

Many of the Indians understand English, but the older ones are backward in speaking ; the younger ones are not so shy in this respect and can speak fairly well, and as the older pupils are discharged from the schools, English-speaking will become more general.

Tea dances are not uncommon on the reserves, but the old custom of 'giving away' is not indulged in to any such extent as it was in former years.

On July 1, a programme was got up for an afternoon's sport, and prizes amounting to over $50 were given away, nearly all the competitors being members of the respective bands, including the Chipewyans.

Treaty payments commenced on July 16 at the agency headquarters and were concluded at Cold lake on the 19th. There were no complaints made and the time was pleasantly spent.

I have, &c.,

W. SIBBALD,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—PEIGAN AGENCY,
MACLEOD, August 24, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the report of this agency for the fiscal year ended June 30, 1901, together with the usual statement of agricultural and industrial statistics covering the same period.

Reserve.—The Peigan reserve is situated on the Old Man's river, west of Macleod. Its form is almost square, and its area one hundred and eighty-one and two-fifths square miles, or more than one hundred and sixteen thousand acres. In addition to the reserve proper, the Peigans have, in the Porcupine hills, a timber limit containing eleven and a half square miles. The lately constructed Crow's Nest railway passes through the reserve from the northeast to the southwest corners, there being fifteen miles of track and two sidings (Nos. 5 and 6) within the reserve limits.

This reserve is composed of undulating prairie-land and untimbered hills, all being suitable for grazing purposes. Favourably situated among the hills are several large springs of good water, to which the range cattle have easy access throughout the whole year, while the Old Man's river, which flows through the reserve, and Beaver creek, which enters from the north, afford an abundance of water during the open seasons.

Tribe.—The Peigans are a portion of one of the three tribes—Blackfeet, Bloods and Peigans—that form the Blackfoot nation or family in the great Algonkian linguistic stock. These Peigans are commonly, and more accurately, designated the 'North Peigans,' in order to distinguish them from the larger branch of the tribe—the 'South Peigans'—who are United States Indians located in Montana.

Population.—The population of the reserve is five hundred and thirty-seven, of which number one hundred and fifty-one are men, one hundred and sixty-seven are women, and two hundred and nineteen are children under sixteen years of age.

Health and Sanitary Precautions.—The general health of the Indians could have been considered good throughout the year but for the prevalence during the winter of grippe, which left in its path much lung trouble, with fatal results. These cases were most numerous amongst the young children. The epidemic of small-pox that swept over the country in February and March caused some alarm, but stringent measures were adopted in order to keep the Indians at home on the reserve and to discourage the visits of outsiders. With the valuable co-operation of the Macleod division of the Northwest Mounted Police, the endeavours to isolate the tribe were so successful that no case of small-pox appeared on the reserve, though the disease was under treatement at all of the adjacent towns.

Crow Eagle.—It is with regret that the death is reported of Head Chief Crow Eagle, who, at the age of sixty-seven years, passed away on March 25, a victim of pneumonia following grippe. Crow Eagle was a kind-hearted and level-headed chief, whose great influence was always exerted in support of the department and in the best interests of his people. It is much to be hoped that a man of equal wisdom will be chosen as his successor.

Resources and Occupations.—Many years of fruitless efforts having demonstrated the fact that on account of climatic conditions and the quality of the soil, this reserve is unsuitable for farming, no further attempts in that direction are being made. Root

crops, however, do fairly well when unmolested by gophers, a good crop of potatoes being the general rule. The reserve being favourable for stock-raising, and its inhabitants naturally inclined to that occupation, special attention is being directed to the cattle industry.

Cattle.—We are again in a position to record a successful year in the management of the cattle owned by the Peigan Indians, whose herd now numbers twelve hundred and six head, as compared with nine hundred and fifty-seven last year, seven hundred and seventy-four in 1899, and five hundred and sixty-seven in 1898 ; thus, in three years the cattle have doubled, and when it is noted that during that period no less than two hundred and seventy animals have been butchered for beef, for which the owners received about $12,000, it will readily be seen that this important branch of our work has encouraging results. A further cause for satisfaction lies in the fact that in 1898 the scrub bulls previously in use were replaced by thorough-bred shorthorns, the number of which, proportionate to the growth of the cow herd, was increased during succeeding years by the importation of more pedigreed bulls from Ontario and Manitoba ; therefore, an improvement in quality due to breeding is added to a large numerical increase.

Buildings and Implements.—A marked improvement is observable in the Indian houses. Seven frame dwellings are now built, and three more planned for erection in the fall, while a large number of log houses have been made more habitable by removing the dirt roofs and substituting lumber and shingles.

Eight new mowers, a like number of horse-rakes, twenty sets of harness, and six more wagons were added to the working equipment of the tribe, who, in the item of wagons, have purchased with their own money some fifty-two in three years.

Education.—The Church of England and the Roman Catholic boarding schools, in which are forty Indian pupils, still continue with comendable zeal their efforts to elevate the mental and moral standard of the children entrusted to their care.

Saw Mill.—Three thousand seven hundred logs were cut this year at the mill, from which over three hundred thousand feet of lumber was manufactured. The saw-mill continues to do good work, and the advantages arising from its possession are to be observed in all parts of the reserve.

I have, &c.,

R. N. WILSON,
Indian Agent.

NORTHWEST TERRITORIES,
ASSINIBOIA—PELLY AGENCY,
COTE, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report for the year ended June 30, 1901, with tabular statement and inventory of government property.

Reserves.—This agency is made up of Coté's band, No. 64 ; Key's band, No. 65 ; Keeseekouse band, No. 66, also a portion of Key's band living on a fishing station at the mouth of Shoal river, Lake Winnipegosis. Coté's reserve is on the east side of the Assiniboine river close to the Duck mountains, having an area of thirty-six thousand one hundred and sixteen acres. Key's reserve is on the Assiniboine river, sixteen miles northwest from the agency headquarters, and has an area of nineteen thousand

five hundred and sixty acres. Keeseekouse reserve adjoins Coté's reserve on the Assiniboine river, and has an area of eighteen thousand three hundred and ten acres.

Tribe.—The Indians of Cote's and Keeseekouse bands are Saulteaux and those of Key's band are Swampy Crees.

Vital Statistics.—The population of Coté's band consists of sixty-two men, seventy-one women, sixty-nine boys, fifty-seven girls, total, two hundred and fifty-nine. Key's band consists of fifty-two men, sixty-two women, forty-seven boys, fifty-seven girls, total, two hundred and eighteen. Of this number one hundred and forty-eight reside at the fishing station at the mouth of Shoal river. Keeseekouse band is made up of thirty-six men, fifty women, thirty-four boys, and thirty girls, making a total of one hundred and fifty in this band.

There were during the year twenty-nine births and fifty-three deaths, making a decrease of twenty-four since last year.

Health.—The general health of the Indians has not been as good as in former years, the cause being traceable to pulmonary troubles, and a good deal of mortality amongst children, the result of measles. A certain number of chronic cases suffering from scrofulous tuberculosis are attended to by the medical officer, Dr. Cash, on his several visits ; however, but little can be done for this class of patients towards a permanent cure, although the doctor is very earnest in his work and gives a great deal of care to those he attends. All garbage and refuse has been gathered up and burned. Houses have been whitewashed, and all Indians not previously vaccinated were attended to at the annuity payments.

Resources and Occupations.—The principal occupations of the Indians here are hunting, fishing, freighting, stock-raising, and farming. The last-mentioned consists of growing oats, barley and root crops, which, I am sorry to say, was a total failure on account of the drought and midsummer frost. Seventy-nine head of beef cattle were sold for the benefit of the Indians, and the proceeds were distributed amongst the several owners, amounting to $3,039.85. The sum of $1,573.50 was realized by the sale of beef and including the value of beef consumed, making a grand total of $4,613.35 derived from the cattle industry alone.

Owing to the demand for labour and fish by the large concerns doing business on Lake Winnipegosis, the Indians at Shoal river have earned a good deal through this source.

Education.—The Presbyterian boarding school, under the able management of Rev. Neil Gilmour, has forty-one pupils on the roll. The church at a very great expense has built a large commodious building, where the children are now all living under one roof, and the old stone building has been torn down. The buildings and premises are kept in splendid order, everything is neat and tidy.

On Key's reserve they have a day school managed by the Rev. Owen Owens, under the direction of the Church of England. The school-house is well kept and the children look clean and tidy. The number on the roll is fourteen, with an average attendance of six. The school at Shoal river is looked after by the Rev. A. T. Norquay. There are twenty pupils on the roll, with an average attendance of fourteen. This school is doing very well.

The day school on Keeseekouse reserve is under the auspices of the Roman Catholic Church, Mr. W. A. Tucker, teacher. It has eight pupils on the roll with an average attendance of two. The attendance at this school is very irregular and it is now closed in consequence.

Buildings.—During the year there have been erected five dwellings and nine stables ; but as they have in most cases taken the place of old buildings, the number remains about the same as it was last year.

Stock.—The live stock is in splendid condition and came through the winter in good order with the exception of the usual percentage of casualties, which is inevitable in a large number of cattle. Eight thorough-bred pedigreed shorthorn bulls have

been purchased to replace old and useless bulls. The number of calves will be small this year on account of these old bulls having been kept too long on the reserves here.

At the last round-up the total number of cattle in the agency was eight hundred and eighty-nine.

Religion.—The Indians of Cote's band are Presbyterians. They have a church on the reserve which they attend with regularity. On Key's reserve and at Shoal river the Indians are under the auspices of the Church of England, and divine worship is well attended.

The Indians of Keeseekouse band have a church on the reserve of the Roman Catholic denomination. There is a very good attendance.

Of course there are still a large number of pagan Indians.

Characteristics and Progress.—The Indians here appear to be quiet and law-abiding ; they are neat in their personal appearance, and their dwellings are clean and tidy. I observe a tendency to improve the condition of their houses by the addition of tables, chairs and cooking utensils, also stoves. This in itself is a sign of progress. I find the sons of old Singuish, head man on Cote's reserve, very willing and anxious to get on, and I must say I have always found Chief Coté of great assistance to me in trying to carry out the department's instructions.

The Indians have put in a crop of wheat, barley, oats and potatoes. They have also broken up some new land, but owing to the close proximity of the Duck mountains, I fear that it is a source not to be depended on. The Indians on this account do not seem very eager to put in large crops, but rather to direct their energies towards stock-raising.

Temperance and Morality.—A few cases have come to my knowledge of Indians obtaining intoxicants, but this being through the medium of half-breeds, it has been impossible to obtain sufficient evidence to prosecute. The morals of the Indians compare favourably with those of other bands.

General Remarks.—Having been transferred from Duck Lake to this agency, where I took charge on November 8 last, my knowledge of the individual Indians or their resources is too limited to enable me to furnish an extensive report as to their progress, but I cannot help thinking that, with the hunting facilities they have here, together with an earnest effort on their part, in the direction of mixed farming and stock-raising, I should say, with the practice of a little economy, these Indians should be able to make a very comfortable living with the exception of the sick, aged and destitute ; these we always have with us.

I have, &c.,

R. S. McKENZIE,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—SADDLE LAKE AGENCY,
SADDLE LAKE, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901, with statistical statement and inventory of government property.

SADDLE LAKE BAND, No. 125.

Reserve.—This reserve is situated in townships 57 and 58, ranges 10, 11, 12 and 13, west of the fourth meridian. The area, inclusive of Blue Quill's reserve, No. 127, adjoining it to the west, is eighty-two thousand five hundred and sixty acres.

The surface to the north and west is rolling prairie land, while to the southeast it is comparatively level. There are numerous small hay swamps scattered over the reserve, some of which produce a good supply of hay; of timber, poplar groves abound all over, with an occasional clump of spruce. One of the most attractive features of the reserve is its adaptability for stock-raising. Saddle lake is situated close to the northern boundary, about midway between the northwest and northeast corners.

Tribe.—The Indians occupying this reserve belong to the Cree nation.

Vital Statistics.—The population, including Blue Quill's band, numbers two hundred and sixty-seven souls, consisting of sixty-four men, sixty-one women and one hundred and twelve children. There is a decrease of five persons as compared with the previous year. The births numbered twelve, while the deaths amounted to eleven during the year.

Health and Sanitary Precautions.—The general health of these people has been good, with the exception of a few suffering from scrofula and consumption. The sanitary precautions, regarding the cleaning of houses and premises, and the burning of refuse matter, are carried out. About three hundred of the Indians of this agency were vaccinated during the spring.

Resources and Occupations.—The principal industry followed by these Indians is stock-raising, and from it they derive a considerable portion of their earnings. But it entails a great deal of work in summer, securing a sufficient quantity of hay, and in winter, the hauling of it from long distances, and attending the cattle keep stockholders well employed until spring.

Farming operations are also carried on, but with no great success. Last year's crop was a failure, owing to the continuous wet weather.

When not engaged in farming pursuits, some of the Indians get work freighting.

Buildings and Stock.—The houses are of log and well built. One new house with a shingle roof was erected, and shingle roofs put on two others this spring. In summer the Indians prefer living in tents, finding them more conducive to health and comfort during the warm weather. The cattle on this reserve are in excellent condition.

Farming Implements.—This band has a good supply of mowers, horse-rakes and wagons, most of which have been procured with proceeds derived from the sale of cattle. These Indians also own a fair number of ploughs and harrows, all of which are kept in good repair.

Education.—The Saddle Lake day school is situated on the Saddle lake portion of the reserve, and is under the auspices of the Methodist Church. Good progress is being made at this school.

The boarding school is located on the portion of the reserve occupied by Blue Quill's band, and is in connection with the Roman Catholic mission. During the year satisfactory progress has been made by the pupils in their educational and industrial studies. The most perfect order and discipline prevail in the institution.

Religion.—The Indians of the Saddle Lake reserve are principally Methodists, the remainder Roman Catholics. Services are held every Sunday in the school-house.

The members of Blue Quill's band nearly all belong to the Roman Catholic faith. The Rev. Father Grandin is in charge of the church on this reserve. The Indians all take a great interest in the Sunday services, and their attendance is regular.

Characteristics and Progress.—This year the Indians have shown more desire than usual for work. They are peaceable and law-abiding, and I have noticed that they show a disposition to keep their dwellings clean. They are also neat and tidy in their personal appearance.

Temperance and Morality.—I am pleased to say that no cases of intemperance came to my notice during the year. General morality of the Indians is fair.

Whitefish Lake, or James Seenum's Band, No. 128.

Reserve.—This reserve is situated north of Saddle lake, in townships 61 and 62, ranges 12 and 13, west of the 4th meridian, and occupies an area of eleven thousand two hundred acres. It is a long strip of land of about twelve miles in length, running north and south along the shores of Goodfish lake and Whitefish lake.

The greater part is undulating and wooded with poplar and a little spruce. The land is very stony in parts, but grain and roots can be successfully grown in favourable seasons. The lake from which the reserve derives its name is an extensive sheet of water, and abounds with whitefish and jackfish.

Tribe.—The Indians of this band belong to the Cree tribe.

Vital Statistics.—This reserve has a population of three hundred and twenty, made up of seventy-three men, ninety-five women and one hundred and fifty-two children. There were ten births and fourteen deaths, the chief mortality being amongst the infants.

Health and Sanitary Precautions.—During the year the general health of these Indians has been much better than in previous years, and the reserve has been free from epidemics. Most of the houses are clean and well kept.

Resources and Occupations.—The industries followed by these Indians are mixed farming and stock-raising ; the latter, however, is the principal source of livelihood for them. Owing to the unfavourable season last year, the grain crops were not a success. About one hundred and forty-five sacks of flour were produced from the wheat crops owned by the Indians, and ground at the grist-mill on this reserve. Outside of their usual routine labour on the reserve, a few of the men engage in trading and working on the Hudson's Bay Company's boats in the north. A good supply of fish is taken from the lakes, and proves a valuable assistance to the people, especially during the winter-time.

Stock and Implements.—The live stock belonging to the Indians of this reserve is in good condition and the increase satisfactory. These Indians are well supplied with mowers, horse-rakes and wagons, which they purchased chiefly with money derived from the sale of beef.

Education.—There are two day schools on this reserve, one at Goodfish lake, towards the south end, and the other at Whitefish lake, towards the north end of the reserve. Both schools are under the auspices of the Methodist Church, and throughout the year there has been a very good attendance at both. They are doing good work and the progress is satisfactory.

Religion.—The Methodist church is situated at the north end of the reserve, and regular services are held there by the resident missionary, the Rev. E. B. Glass. The majority of the Indians belong to this denomination. A new Roman Catholic church has been erected during the year and located near Goodfish lake, about the centre of the reserve, where services are conducted regularly by the clergy of the Saddle Lake mission.

Characteristics and Progress.—These Indians, generally speaking, are industrious, and of rather an independent character. They are law-abiding and always anxious to improve their mode of living. During the past year Arthur Steinhauer purchased a binder, Thomas Sinclair and Moise Jackson a wagon each.

Lac la Biche Band, No. 129.

This band consists of sixteen persons—three men, seven women and six children. They make their living by hunting and trapping, and do not receive any assistance from the department beyond their treaty money.

CHIPEWYAN BAND No. 130.

This band of Chipewyan Indians live in the neighbourhood of Heart lake, about one hundred and five miles north of the agency headquarters. They number sixty-nine persons, made up as follows : fifteen men, seventeen women and thirty-seven children. The band has increased two by births during the year. Hunting, trapping and fishing are their chief means of making a living, and no assistance was rendered them by the department with exception of their treaty money, also a little food, ammunition and twine, issued to them during the treaty payments.

BEAVER LAKE BAND, No. 131.

The population of this band at the last treaty payments was one hundred and two, composed of twenty-three men, thirty-two women, and forty-seven children. These Indians make their homes at Beaver lake, about twelve miles from Lac la Biche, and live by hunting and fishing.

GENERAL REMARKS.

During the year three new frame buildings, 40 x 22 feet each, were erected at the agency ; a storehouse, driving-house and stable. The lumber for these buildings was sawn at the mill here, and the work of putting them up was performed by Indians. All the agency premises have been well fenced.

I have, &c.,

GEO. G. MANN,

Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—SARCEE AGENCY,
CALGARY, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of this agency for the fiscal year ended June 30, 1901, together with tabular statement and inventory of government property.

Reserve.—The Sarcee reserve lies between the Elbow river and Fish creek, and comprises township 23, ranges 2, 3, and 4, west of the 5th initial meridian, with an area of sixty-nine thousand one hundred and twenty acres.

The agency headquarters are situated in the valley of the Fish creek some nine miles southwest of the town of Calgary.

The land is rolling, and in the western part of the reserve well wooded with pine, spruce and poplar. It is watered by the Elbow river and Fish creek and numerous other streams, and is well adapted for stock-raising.

Tribe.—These Indians are Sarcees, originally belonging to the Beaver tribe from the far north.

Vital Statistics.—The population of this reserve is two hundred and five, being an increase of two over last year. Although the increase is small, it goes to show that

these Indians are more than holding their own ; and as a tendency is noticed on the part of some of them to take more interest in the sanitary measures the department is trying to enforce, it is only natural to expect that the Sarcees will increase more materially in the future.

Health and Sanitary Precautions.—The general health of the band has been good. No epidemic visited the reserve during the past year, and we were most fortunate in escaping the small-pox which was all around us during a part of last winter and spring. Dr. Lafferty, the medical officer, vaccinated every man, woman and child who required it. The prejudice against vaccination has quite died out and all came forward eagerly to have this operation performed. Other sanitary precautions, such as keeping premises clean and isolation of those suffering from infectious diseases, are observed as much as possible.

Resources and Occupations.—Cattle-raising, farming, haying, working for white settlers, such as herding stock, selling wood to townspeople, and sale of hay and other produce, keep these people prtty well employed, and from these industries many of them make a good living.

Buildings.—Several new dwelling-houses and stables have been erected by the Indians ; they are an improvement on former years. These buildings have been all put up by the Indians themselves and at their own expense, from proceeds derived from sale of beef, grain and other produce.

Stock.—This is the most important industry we have, and I am glad to report that although our herd is yet a small one, comparatively speaking, our Indians are taking better care of their cattle and are more interested in them than formerly.

Farming Implements.—Several wagons, mowers, rakes, sets of double harness and smaller implements, also a few teams of work horses have been added this year to the personalty of the Indians by private purchasing, all of which tends to show advancement.

Education.—On this reserve and in connection with the mission there is a boarding school under the auspices of the Church of England. At present there are only eleven pupils on the roll. Five male pupils were drafted to the Calgary industrial school, one male pupil was added to the roll, and one female pupil died of consumption during the year.

The pupils have made fair progress in their class-work and the various industries taught in the institution.

Religion.—Some of these Indians are members of the Church of England, which has a nice little church near the mission. The Venerable Archdeacon Tims is the incumbent. Services are held regularly on Sundays, which all the pupils and some of the parents attend.

Characteristics and Progress.—Some are progressing and becoming better off, while others who are lazy and lacking in ambition eke out a precarious livelihood. Several have well-built houses and well furnished and are quite as comfortable in this respect as many of their white neighbours.

Temperance.—These Indians are passionately fond of strong drink, but I am glad to report that through the vigilance of the Northwest Mounted Police the traffic in liquors is on the decrease. I have not had a case for the past six months.

General Remarks.—The visit of their Excellencies the Governor General and Lady Minto and party in September was much appreciated by the Indians. Chief Bull's Head's greeting to their Excellencies was most cordial and I might say quite characteristic. He said : 'I have been sick ; I am troubled with my head and my heart. I was pretty sick yesterday, but this morning as soon as I heard you were coming, I felt better, and now you are here, I feel all right, and my heart beats as it did when I was a young man.'

Much to the amusement and pleasure of their Excellencies and citizens of Calgary who accompanied the vice-regal party, some horse-racing and other games were

indulged in by the Indians, and before leaving His Excellency addressed the Indians and congratulated them on their progress and gave them some excellent advice and thanked them for their entertainment. In addition to distributing some prizes for horse-racing, he made the band several presents before leaving.

Her Excellency Lady Minto has since sent a prize to the Indian who had the best kept farm and to the Indian woman with the best flock of poultry.

All this, I need hardly say, has had a beneficial effect and has been an encouragement to those who are trying to improve their condition.

I have, &c.,

A. J. McNEILL,
Indian Agent.

NORTHWEST TERRITORIES,
ALBERTA—STONY AGENCY,
MORLEY, July 27, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901, together with tabular statement and inventory of government property.

Reserve.—The Stony reserve is situated in central Alberta in the foot-hills of the Rockies, about forty miles west of Calgary, and the Bow river divides the reserve in two, Bearspaw's and Chiniquay's bands on the south side, and Jonas's band on the north side.

The area is sixty-nine thousand seven hundred and twenty acres. It is estimated that neary two-thirds of this is covered with timber, spruce, Douglas pine, jack-pine and poplar. The land back from the river benches is very hilly.

The Canadian Pacific railway follows the Bow river, and Morley station is within half a mile of the agency headquarters.

Tribe.—These Indians are Stonies, a branch of the Sioux nation ; they have intermarried largely with the northern Crees.

Vital Statistics.—The present population is six hundred and thirty-seven, made up of one hundred and forty-five men, one hundred and eighty women, one hundred and sixty boys and one hundred and fifty-two girls.

This is an increase of eleven for the year.

Health and Sanitary Precautions.—With the exception of consumption and scrofula, there has been no sickness among these Indians.

The sanitary precautions recommended by the department have been observed as closely as possible.

Resources and Occupations.—As the reserve is too close to the mountains to be a good farming country, no grain is grown except for green feed.

The Indians have small patches of potatoes in the hills, which yielded a very good crop last year.

Stock-raising is the principal industry of the Stony Indians.

The sale of dry fire-wood through the winter months is a great help to them.

Fish are plentiful in the lakes and streams around the reserve, and in certain seasons they supplement the government rations considerably.

The seam of coal has been opened out and a considerable quantity of coal has been taken out. The seam is five feet thick and is a good coking coal.

Buildings.—Quite a number of the Indians have taken the sod roofs off their houses and replaced them with shingled roofs, while others have built new ones.

Stock.—There have been considerable losses owing to a very bad spring, but I am glad to say that some of the Indians are taking more interest in their cattle than they previously did, and I hope with the fencing of the reserve and the extended breaking of land for green feed, to increase the herd greatly.

Farming Implements.—These Indians are not very well supplied with implements, but are getting a good number of wagons out of the proceeds of their cattle, also mowers and rakes.

Since the wood industry has commenced, they find the need of feeding their horses properly.

Education.—The McDougall boarding school has been accommodating an average of forty-five pupils during the year.

Mr. J. W. Niddrie, as principal, has proven himself thoroughly acquainted with his work.

Religion.—These Indians are all Methodists.

The Rev. R. B. Steinhauer, B.A., is the missionary in charge. His services are very well attended, as the majority of these Indians are good-living people.

Characteristics and Progress.—These Indians are noted mountain hunters and in the fall and first part of the winter kill quite a lot of game, which makes them very indifferent about working ; but there is a marked advance amongst the younger people, as they find more money in working than hunting.

They work very well when given contracts, but are opposed to working for wages. In nearly all cases they will not work more than a month in one place.

Temperance and Morality.—No cases of intoxication have come under my notice. With the exception of a very few, the Indians lead very moral lives.

General Remarks.—During the past year I have made considerable improvements to the agency buildings in the way of moving them to more suitable places and also putting stone foundations under them, and in the erection of a cottage hospital, which is to be used in stamping out consumption and scrofula amongst the tribe.

Dr. Lafferty has taken great interest in this enterprise and it is hoped it will prove satisfactory.

I have, &c.,

H. E. SIBBALD,

Indian Agent.

NORTHWEST TERRITORIES,

ASSINIBOIA—TOUCHWOOD AGENCY,

KUTAWA, August 29, 1901.

The Honourable

The Superintendent General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit my annual report of this agency for the year ended June 30, 1901.

Reserves and Tribes.—There are seven reserves in this agency, viz. :—Muscowequan's, No. 85, Saulteaux ; George Gordon's, No. 86 ; Poor Man's, No. 88 ; and Day Star's, No. 87, all Crees ; and Fishing lake, No. 89 ; Nut lake, No. 90 ; and Kinistino's. These last three reserves belong to Yellow Quill's band, the members of which are Saulteaux.

The reserves immediately around the agency headquarters are situated in townships 26 to 29, and ranges 14 to 17, while the Indians of Yellow Quill's band reside at a distance. They consist of three small bands, viz. : Fishing lake, residing fifty miles away ; Nut lake, one hundred ; and Kinistino, one hundred and sixty miles north from the agency headquarters, and all situated in townships 33, 38 and 30, ranges 12 and 13, excepting Kinistino's reserve of fifteen square miles in townships 41 and 42, range 15, all west of the second initial meridian.

Gordon's and Muscowequan's reserves are located in the Little Touchwood hills ; Day Star's and Poor Man's in the Big Touchwood hills. The agency headquarters are situated on section 16, township 28, alongside the old main trail leading to Duck lake and Prince Albert. The agency headquarters are sixty miles from Fort Qu'-Appelle, and eighty miles from Qu'Appelle station, on the Canadian Pacific railroad, and seventy-five miles from Regina.

The Dominion telegraph office is about three hundred yards from this office, and the same from the post office, where we receive our weekly mail. The mail comes here on Saturday and leaves on the next Wednesday, every week.

The total area of the seven reserves is one hundred and twenty-two thousand nine hundred and eighty-six acres. About thirty-two thousand of this is covered with willow scrub, small bluffs and timber. Our nearest stream is the Qu'Appelle river, fifty miles away at the nearest point. On the reserves are numerous ponds, creeks and rivers and small lakes. The Fishing and Nut lakes and Barrière river are the only ones that contain fish.

Vital Statistics.—The population of this agency is as follows : two hundred and forty-three men, two hundred and sixty-nine women, and three hundred and thirty-eight children, making a total of eight hundred and fifty souls. There were twenty-four births and forty-two deaths during the year in the seven bands, being a decrease of eighteen souls.

Health and Sanitary Precautions.—The general health of all the seven bands has been fairly good, consumption being the cause of what sickness we had. The sanitary regulations of the department have been strictly carried out.

Resources and Occupations.—The Indians in this agency have very few chances of earning money, as all work done for traders, freighting, supplying wood and hay must always be taken out in trade, and the freighting of supplies for the agency, the supplying of what little hay and wood is required at the agency headquarters is paid for in rations from the department supplies.

Cattle-raising is the most reliable occupation at present, although some of the reserves are well adapted for mixed farming, and in the near future, when we have a mill and market within reasonable distance, I have no hesitation in saying that large quantities of all kinds of grain could be profitably raised, and the more advanced Indians see this and are steadily preparing themselves and advancing with the times.

Characteristics and Progress.—Amongst many improvements on the different reserves I may mention one or two cases : on Gordon's reserve, a young man, Josiah Anderson, a graduate of Elkhorn school, and a blacksmith by trade ; this young man has fifteen head of cattle, two teams of good heavy work horses, a half share in a binder, a mowing-machine and rake, a good house, story and a half, shingle roof, dormer windows, a verandah in front, good kitchen at the back, a nice neat fence around the house, together with all the necessary small tools for doing his work. He will have, at a low estimate, over eight hundred bushels of oats and he has an ample supply of vegetables. He erected a blacksmith-shop 20 x 24 feet, double slide windows, double door, in fact a most complete building. He is also in charge of the threshing-machine which does the threshing of all grain in the agency. I may mention that this machine is the private property of the Indians. I have given him the use of a set of blacksmith tools, and he attends to all blacksmithing and repairing for the agency here, his own reserve, and some of the other reserves that have no blacksmith-shop.



METHODIST DAY SCHOOL, SADDLE LAKE, N.W.T. 1901.

He is to be married this fall to a good, respectable, smart, hard-working girl, who I think will make him a good wife. She is also a graduate of Elkhorn industrial school. The Indians are industrious and law-abiding, and are getting better off.

Buildings and Stock.—The buildings at the agency headquarters are in good repair. The cattle are improving in quality, the result of thorough-bred bulls. We have a number of good heavy horses. These are purchased by Indians from proceeds of beef sold. The Indians are well supplied with wagons, mowers and rakes. These are their own property.

Education.—The day school at Day Star's reserve is well attended, fourteen on the roll, which is all the children on this reserve of school age. Progress good, attendance regular. The parents are greatly interested in the education of their children. Mrs. Sarah M. Smythe is in charge of the school, and gives good satisfaction. On Gordon's reserve there is a large stone boarding school, conducted by the Church of England, Mr. and Mrs. Mark Williams being respectively principal and matron. The government grant is for thirty children, and they have the complement. The children are well looked after, are happy and contented, and the progress made is most favourable. The buildings inside and out are kept scrupulously clean and tidy. The pupils are well dressed and clean at all times. The boys are taught farming, gardening and stock-raising. The girls are taught all the duties in connection with keeping a house properly, so when discharged they are thoroughly competent to take charge of a house and manage it economically. At Muscowequan's reserve there is another boarding school; this is also a very large stone building, and is under the auspices of the Roman Catholic Church. The principal is Father Jacob. The work of a matron is looked after by three Sisters of Charity, the school by Sister Valade, and the outside work by a lay brother. There are thirty pupils at school. The same remark as to the different branches taught, the cleanliness of the children, the good condition of the buildings and surroundings in Gordon's school, applies here.

Religion.—There are two denominations here working amongst the Indians, the Church of England and the Roman Catholic. However, the majority are still pagans —although they have abandoned, to a great extent, many of their old pagan ceremonies.

Temperance and Morality.—I am pleased to say that I have not had one case of intemperance or immorality come under my notice during the past year.

In conclusion, I am most happy to report that the staff under me have worked conscientiously, and performed their duties satisfactorily to me.

I have, &c.,

H. MARTINEAU,
Indian Agent.

NORTHWEST TERRITORIES,
BATTLEFORD INSPECTORATE,
PRINCE ALBERT, September 25, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report on the inspection of Indian agencies and reserves for the fiscal year ended June 30, 1901.

DUCK LAKE AGENCY.

This agency was inspected in June and July, 1900.

In October Mr. R. S. McKenzie, who had been in charge of this agency for some fourteen years, was transferred to the Pelly agency, and was succeeded by Mr. W. E. Jones, who had been for a number of years in charge of the latter agency.

The general condition of these bands shows a steady improvement. Their industries have been moderately productive, and they are able to live comfortably with very limited assistance.

Indians' Dwellings.—Several new houses of a better class have replaced poorer ones, especially on the reserves at La Corne, where in the spring of 1900 the Indians had the use of a saw-mill for a few weeks, and as a consequence several were put in possession of a fair supply of lumber.

Hay Supply.—Notwithstanding the unfavourable season for haying, owing to the depth of water in the sloughs, a sufficient supply of hay was procured throughout the agency.

Agency Headquarter Buildings.—The agency and farm dwellings, storehouses and outbuildings have been kept in good repair.

Office Records.—The cash-book, store ledger and stock records were found to be in good order and accurate at the date of the transfer of the agency.

CARLTON AGENCY.

This agency was inspected in October and December. It is in charge of W. B. Goodfellow, with the assistance of T. Eastwood Jackson as clerk.

Agency Headquarter Buildings.—At the agency headquarters on Mistawasis' reserve are located the dwellings of the agent, clerk, miller and interpreter, the office, storehouse, blacksmith-shop and a granary. The two last mentioned were built recently. They are suitable buildings, conveniently located, and were much needed.

Grist-mill.—The grist-mill was in excellent running order and was doing good work. The return of flour varied from thirty-five to forty-five pounds per bushel, and from first-class wheat the sample of flour made was equal to Strong Baker's.

Saw-mill.—The saw-mill and shingle-machine are portable and were operated during the year on Mistawasis' and Ahtahkakoop's reserves. A portion of the product was used for the improvement of the Indians' houses and a portion for repairs to the agency and farm buildings.

Grain-growing.—The season of 1900 was favourable for grain. The yield was accordingly fair and the quality good, except that in some instances there was too great a quantity of smut and weed-seed, indicating some fault in the seed or in the cultivation. There are a few specimens of noxious weeds, but the most injurious kinds are not found. The crops of the present season, though not extensive, are very promising.

Hay Supply.—For the past three seasons, including the present, it has been found very difficult to procure a sufficient supply of hay. The sloughs which furnished the supply of former years are full of water, and the prairie on some of the reserves, particularly Ahtahkakoop's, is covered to such an extent with bluff and scrub that ridge hay is scarcely to be had. A few who raise considerable grain have been able to utilize their straw to good advantage as fodder.

Indians' Herds.—Owing to the precariousness of the hay supply, it has not been thought advisable to allow the Indians' herds to become too large. An undue increase has accordingly been prevented by larger sales. The number of cattle on hand in December last was eight hundred and fifty head, which shows a slight decrease in the past two years, but an increase of ninety-four head in the past five years. The older reserves of this agency are plainly adapted to mixed farming and to grain-growing. There must be attached an importance at least equal with stock-raising.

Hunting and Fishing.—Hunting and fishing as a means of subsistence have been abandoned by most of the inhabitants of the older reserves, but these pursuits still afford a livelihood to nearly all the Indians of the Big River and Meadow Lake reserves, as well as to a considerable proportion of those of the Sturgeon Lake and Sandy Lake bands.

Reserve No. 106A.—On reserve No. 106A, situated north of Sturgeon lake, some twenty Indians are located who have come from the hunting regions farther north and settled down to civilized pursuits. During the past year they have been able to live comfortably and almost entirely by their own efforts. They raised but little grain, but had a good crop of potatoes, for which they found ready sale to the lumber camps. Their surplus hay also they were able to dispose of to good advantage. These as well as the Sturgeon Lake Indians earn a part of their livelihood from freighting and day labour in connection with the lumber industry.

Meadow Lake and Big River Indians.—On Meadow Lake reserve, No. 105, and Big River, No. 118, the Indians are now being located and initiated in the white man's modes of life. With this in view, a farming instructor has been placed in charge and a day school opened on each reserve. At the date of inspection there was little further to be reported. One of the first and most important matters to engage the attention of the agent and instructor in this connection was to induce the Indians to build comfortable houses in locations suitable for their industries and convenient for school purposes. The services of the agency saw-mill will be turned to good account for the benefit of these new bands, provided the difficulties of transporting the heavy engine over miry roads can be overcome.

Sioux.—The Sioux on reserve No. 94A, number about twenty-five. They have had a year of moderate success with their grain, gardens and hay, and are living comfortably and making some progress in civilization. The remainder of the Sioux of this district, numbering about one hundred, occupy an encampment near Prince Albert and prefer to live by day labour around town.

Hunting Indians.—The hunting Indians of this agency consists of the following bands :—

William Charles's band, numbering thirty-one men, forty women, and ninety-four children ; total, one hundred and sixty-five.

James Roberts' band, numbering seventy-nine men, ninety-eight women and two hundred and ninety-eight children, in all four hundred and seventy-five.

Peter Ballendine's band, consisting of sixty-eight men, eighty-one women and two hundred and fifteen children ; total, three hundred and sixty-four.

These Indians are all Crees, except twenty-one members of James Roberts' band, who are Chipewyans and who received annuity this year for the first time.

There were during the year forty-five births in these bands and twenty-seven deaths. The number of deaths is larger than usual and is accounted for in great measure by the prevalence of a sort of influenza during the latter part of the winter, especially throughout a section of James Roberts' band at Lac la Ronge.

The livelihood of these bands continues much the same as in recent years. Beaver and otter are extremely scarce in all the country south of the Churchill river and for some fifty miles further north. Martin, fisher and mink are somewhat more plentiful. Bears, foxes, lynx, all of which are migratory, are on the increase. Those who are skilled in the hunting of the moose and cariboo will kill from five to ten of the former and from ten to twenty of the latter in a season. Fish continue plentiful, but the catch is affected to such a degree by the varying depths of the water in the rivers and lakes that those who depend solely on fish for their food, as not a few do, are occasionally found in a state of destitution. The Hudson's Bay Company's officer at Lac la Ronge, who is also an officer of the Indian department in that region, is very attentive to the wants of the Indians and employs judiciously such means as are placed at his disposal to avert distress among them.

The medicines supplied annually by the department to these bands, put up as they are in a shape very convenient for distribution, are a boon to the Indians for which as well as for other benefits they express sincere gratitude.

BATTLEFORD AGENCY.

As I have treated of the affairs of this agency in a separate report it is unnecessary for me to dwell at length upon them here.

On March 3, I arrived at Battleford for the purpose of beginning the inspection, but owing to the continued ill health of Agent Daunais, I was directed by the Indian Commissioner to take charge of the agency until June 30. On May 10, Mr. Daunais died, much regretted by the various officers of the department with whom he had been associated, as well as by the Indians for whose well-being he had worked with much success.

Early in July Mr. J. P. G. Day was appointed to the charge of the agency, and by direction of the Indian Commissioner I continued here throughout the annuity payments, during which time the transfer was effected.

Agriculture.—During the past year there has been on most of the reserves of this agency a continuation of the improvement in agriculture, in respect to both area and methods, which was begun a few years ago. Very much remains to be done before the Indians' cultivation is entirely equal to that of good farmers ; but in the meantime the fact that last season this agency threshed upwards of seventeen thousand bushels of grain, and that several individual Indians had upwards of three hundred bushels each, must be regarded as encouraging.

Crops of 1901.—This season the aggregate area of the Indians' crops is slightly over eleven hundred acres. This crop, if safely harvested, should place many of the Indians in a position of independence.

General Condition.—The stock-raising industry has also been moderately successful throughout the year, and along with the prosperity of their industries there is a noticeable amelioration in the health, habits, manners and general condition of the Indians.

The Onion Lake and Saddle Lake agencies and the Moose Woods reserve were not inspected during the past year.

I have, &c.,

W. J. CHISHOLM,

Inspector of Indian Agencies.

NORTHWEST TERRITORIES,
CALGARY INSPECTORATE,
June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to present my twenty-third annual report of my work of inspecting Indian agencies.

During the past year I have inspected the following agencies : Morley, Blackfoot, Blood, Peigan, Hobbema, and Edmonton ; and also the following reserves : Jonas, Chiniquay, Bearspaw, Samson, Blackfoot, Blood, Peigan, Ermineskin's, Louis Bull, Montana, Enoch, Alexander, Michel, Joseph and Paul.

EDMONTON AGENCY.

I inspected the Edmonton agency in August and September, 1900, and again in July of this year.

Staff.—James Gibbons, agent; H. A. Carruthers, clerk; John Foley, interpreter; Thomas McGee, miller ; Delmar Bard, farmer, Alexander and Joseph bands ; G. W. Blewett, farmer, Paul band.

Agency Office.—On both occasions I audited the account books of the agency, and compared the stock of goods on hand with the balances of each account shown on the books. I also audited the cash-book. I found all these accounts kept accurately, neatly and well, and the balances brought down to agree with the balances of both cash and goods on hand.

The office work throughout was well done, all records properly filed, and all books written up to date.

Mr. Carruthers is an experienced agency clerk and has a good knowledge of the Indian character, which he uses both for the benefit of the government and the Indians.

Headquarter Buildings.—The buildings at the agency headquarters are in as good repair as circumstances surrounding them admit. The office has been made comfortable by plastering it outside ; the interpreter's house has been treated in the same manner. The foundation logs of the stable are decayed.

The officials have each good gardens; the clerk's being an exceptionally good one, every variety of vegetables growing luxuriantly and being treated upon scientific principles. Rare and ordinary flowers are a particular and noticeable feature in his garden.

Large new cattle-corrals have been built at the agency headquarters since my last inspection. These expedite the work of enumerating and branding the Indians' cattle.

Grist and Saw-mills.—I inspected the grist and saw-mills lately erected on a new site, and a steam-engine for the propelling power.

ENOCH'S BAND.

But little farming or gardening was done on the reserve of this band this year. The land is foul, overgrown with weeds, and the crops yield little return for the labour.

I had a 'round up' of the cattle belonging to this band and the agency, when the calves were branded and all the cattle reclassed ; they are all now properly branded 'I. D.' and with the Indian owner's number. Beaverfoot, an advanced and progressive Indian, has removed hither from Alexander's band. It is a 'toss up' whether he will hold to his former habits of industry or fall into the idle ways of the Enoch band. in my opinion he should have remained where he originally gave his adhesion to treaty and where (for an Indian) he was a rich man.

Farm 17.

Delmar Bard is the farmer here. This farmer is an active intelligent young man, and has greatly improved the condition of things on the farm, as well as on the reserve since he accepted the office a year ago. Besides several new cattle-corrals, new fencing, and minor improvements, he has built two bridges and graded the reserve roads. His farming consisted of fourteen acres of oats, a large vegetable garden and ten acres of summer-fallow.

Alexander's Band.

The farming operations of these Indians this year were almost nil ; only three of them had any crop.

Their cattle are in good condition. Some calves were lost by coming too early in the spring, and the lack of comfortable stables for calving cows. All of them are now properly branded 'I. D.' and with the Indian's number. The casualties of adult cattle during the winter were not many ; a few head were killed and eaten by their Indian owners without permission. This is a difficult matter to prevent in a needy band not regularly rationed.

I met every member of this band at their annuity payments, which took place at the time of my inspection. The men, women and children were comfortably clad ; they all were cheerful and merry ; there was no insobriety nor disorderly conduct, and excepting a case of small-pox in the family of a visiting Indian, there was no sickness in the band.

Joseph's Band.

The Indians of this band live by hunting, fishing, a little gardening, and they have a few head of cattle.

I had their cattle rounded up and the calves branded. A very fine new cattle-corral has been built this year by the Indians ; the cattle are mostly Galloways and were in good condition.

There was only one sick woman on the reserve, the others were looking well and were all well dressed. Whitefish and ducks were plentiful. I met the men of the band and had a talk with them in the school-house. They are contented with their lot.

The next day the whole band came over to Ste. Anne's and received their annuities ; all passed off pleasantly. The traders did a lively business and the Indians proved quick and ready customers. There was not a case of law-breaking or disorderly conduct.

Farm 17A.

G. W. Blewett is the farmer here.

This farmer continues successful work among his Indians. He keeps his premises in good order and has a large garden of fine vegetables, several acres of oats and some wheat. He has built two new cattle-corrals since my last inspection ; in consequence, the account of the cattle was accurately taken without difficulty.

Paul's Band.

These Indians are better known as White Whale Lake band. Their reserve is situated on this lake, which has proved a valuable source of food supply, whitefish being plentiful therein.

Hay-making.—Hay-making had commenced on this reserve. As the natural hay meadows were covered with water, in consequence of frequent heavy rain storms this year, the hay must be all cut on the high land. The bridges on the creek having been swept away, the farmer had, with the assistance of his Indians, built new ones, and graded and brushed about a mile of muskeg, in order to re-establish communication between his farm and the Indians' homes.

Cattle.—I had a 'round-up' of the Indians' cattle, and the calves were then branded. The cattle show a slight increase over last year, besides a number that were killed for provisions for the band.

Annuity Payments.—The annuity payments took place during my inspection. The Indians assembled at the farm. Although the Stonies (Assiniboines) are an excitable nation, all passed off without a wrangle or an unkind word being spoken. Traders were on hand to meet the requirements of the Indians, and I understood they sold them goods at reasonable prices. There was no case of disorderly conduct or misbehaviour.

Agent Gibbons has great experience in dealing with Indians and has now an excellent staff ; if he is given a free hand to deal with his Indians and continued generous government assistance in providing breeding cattle, I have confidence that he will soon make his Indians self-supporting.

MORLEY AGENCY.

I inspected the Morley agency in September.

Staff.—H. E. Sibbald, agent ; A. J. Robertson, clerk (since deceased).

Annuity Payments.—This was my second visit to this agency within three months, the later one was, more particularly, to conduct the annuity payments. These passed off expeditiously and pleasantly.

After the payments were completed, most of the Indians 'pitched off' for their fall hunt, in the foot-hills of the mountains ; a minority of the band remained at home to secure some crop and to make hay for wintering their large herd of cattle.

Cattle.—The half-yearly round-up of cattle was made during my inspection in May and June. I have already reported at length on this. There was a prolific return of calves and the herd was in a prosperous condition.

Sale of Cord-wood.—Mr. Sibbald has developed for these Indians a large industry in manufacturing the fallen timber of their reserves into cord-wood, fence posts, &c. There is a good demand for these products from outside points ; they are sold F.O.B. on cars at Morley for cash and at good prices.

Coal of good quality having been discovered on the reserve south of the Bow river about three miles from the Canadian Pacific railway, it is the agent's intention to commence developing it as soon as practicable.

With these industries at work and in view, these bands, by continual judicious management will become prosperous. Very great improvement has taken place in the condition of their homes during the past six years. Mud-covered huts with earth floors have been replaced by good frame and log houses, shingled and floored. Modern furniture, such as good cooking stoves, clocks, chairs, tables, bedsteads, are in common use in the homes of most of the Indians.

Mr. Sibbald sets his Indians an excellent example of industry, temperance and Christian home life, and that they are profiting by his example is apparent. They

take less interest in horse-racing and keep away from Calgary entertainments ; this latter form of amusemement (encouraged by his predecessor) had to be stopped, as it was rapidly demoralizing the younger members of the band.

BLACKFOOT AGENCY.

I visited and inspected the Blackfoot agency during the month of October. The immediate call for my visit was to transfer the agency from Agent Wheatley to Agent Markle. The staff as reconstructed then was :—J. A. Markle, agent ; G. H. Race, clerk ; W. S. Cosgrave, farmer ; A. E. Jones, farmer ; Thos. Lauder, farmer (since resigned).

Indian Office.—I audited all the account-books, took stock of all the stores and articles in use, checked the daily receipts of beef in the beef-book with the provision returns for the whole agency ; audited the cash-book from the date of my last inspection. I had 'round-ups' of Indians' cattle in the several corrals, also of the Indian ponies the property of the government. The agency was then accepted by Mr. Markle, and he assumed the duties of the office with all its responsibilities. These duties are not inconsiderable in connection with the Blackfeet and their large reservation, for these Indians have much to unlearn as well as to learn.

Strange to say, the old warriors and buffalo-hunters are much more amenable to reason and discipline than those that have been born and raised on the reserve. These latter think to prove their bravery by defiance of authority, while the older men know their position and do not think it derogatory to themselves to accept the supervision of their agent.

Most of the younger men drink whisky when they get the chance and cause trouble for themselves and the agent, while the older men, if not total abstainers, do not hunt for whisky.

In promoting Mr. Markle to the charge of such an important agency the department has been good to itself as well as to the Indians. His eighteen years' record as agent in the Birtle agency is proof that he has both the ability and the address to lead Indians into paths of industry and sobriety. His influence will reach to their domestic hearths ; he interests himself in what they shall eat and how to cook their food and a liberal use of soap and water, apparently trivial matters but a great lever in leading to civilized habits, for the bad habits of the women are more difficult to overcome than those of the men, because they are lazy and prefer to lie about and gossip to keeping their children and houses clean and properly cooking the meals for their family.

Industries.—Cattle-raising although in its infancy with this band is even now its most important industry. There has been a fair natural increase in their herd during the past year, and several three to four-year-old steers were put into the ration-house for beef. The prejudice (Crowfoot influence) against taking cattle is perceptibly weakening throughout the whole band and they will soon be tumbling over each other in striving to be served first in future distributions of breeding-stock.

Farming.—Having the advantage this year of the irrigation ditch, a large acreage of oats was sown. A hail-storm had destroyed a portion of this crop ; some potatoes, turnips and other vegetables were grown also ; hay was put up in large quantities for the N. W. M. Police, neighbouring ranchers, for the beef contractors, and for their own cattle.

Coal-mining.—This industry has languished—the mine on the north side of the river, proving only a pocket, has become exhausted. A seam of coal on the south side has been worked since then and promises to be a good one, but the new opening caused the Indians to sell surface coal, and this had disgusted their former customers so much that they have declined to use it, so when the Indians reach good coal, the trade will have to be re-established.

SESSIONAL PAPER NO. 27

BLOOD AGENCY.

I commenced my inspection of the Blood agency on November 13.

Staff.—James Wilson, agent ; Wm. Black, clerk ; F. Dean Freeman, issuer of rations (since superseded) ; C. H. Clark, farmer ; James Grant, farmer ; H. G. Long, farmer (since superseded) ; John English, interpreter.

Indian Office.—I audited the store ledger. Upon taking stock of the goods in the storehouses, I found the quantities of each on hand agreed with the balances in the ledger. I cannot too highly commend Mr. Black for the manner in which he keeps these accounts ; they are not only accurate, but the entries are such that the goods can be traced to their ultimate destination without difficulty.

Beef Account.—This most important of all the accounts has been carefully audited, commencing with 'beef-books,' which contain the original entries of each day's receipts certified by the agent or clerk, or a farmer ; the issuer and the contractor's agent.

It took six hundred and seventy head of cattle to supply these ration-houses, being an average weight for each animal of six hundred and ninety-one pounds, thus showing that the beef was of good weight and quality.

The butchering, receiving, weighing in and issuing beef, are being done with much regularity and carefulness. The ration-houses are kept clean, also the slaughter-pens. I inspected the weights and scales and found them correct.

Flour.—The new delivery of flour is in appearance and dressing Strong Baker's, and the weight and quality of sacks are according to schedule description.

Bacon.—The bacon is of excellent quality, both the July and the November deliveries.

Stock.—The cattle industry is the greatest here and its measure now is sufficient to tax the energies of the agent and farmers, for there is but one Indian I know of here who can be trusted to look after his own cattle, and that is Running Crane, and I have my doubts regarding him if left entirely to himself.

The account at this date is as follows :—

1900, June 30—Adult cattle on hand, 1,513 ; 1900, June 30—Spring calves branded, 453 ; 1900, November 30—Fall calves branded, 80, making a total of 2,046.

1900, November 30.—Deduct beefed this year, 83; total on hand, 1,963, of this number forty-five bulls and fifty-two other catttle are known as agency herd, and the rest, eighteen hundred and sixty-six, are owned by one hundred and twenty-three Indians.

It will be observed that there have been five hundred and thirty-three calves branded this year ; this is considered a good yield from six hundred and fifty-six cows. There were only seventeen more animals killed for beef in 1900 than in 1899. Of the one hundred and twenty-three Indians who own these cattle, twenty-two have cattle this year who did not have any last year.

Cash-book.—My audit is from the finish of my previous one and commenced October 1, 1899.

By a careful progressive audit, commencing at the last named date, I have checked each item of the receipts and disbursements of cash. The entries of the former have all been truly made, and for the latter, properly witnessed receipts or cancelled endorsed bank cheques have been produced as vouchers for each payment made. The balance of $860.24 is the same as the amount to the credit of the agent (as per bank book) in the Union Bank, Macleod, on even date.

The cash transactions of this agency are considerable, and aggregate for the past fiscal year $20,620.76, plus annuities and school pupils' funded cash, $7,112.50, making a total of $27,733.26.

The amount (cash) earned by the Indians or produced by their labour is as follows: Hay contracts (1,186 tons), $3,187.59 ; coal freighting, on account of coal contracts taken for the Indians by the agent, $1,157.27 ; beef sold beef contractors, $3,-486.35; grazing dues, $549.67 ; fencing (all for labour), $820.29 ; brome grass seed sold, $383.35 ; flour and other supplies, freighting, $1,045 ; coal mined, $160 ; wages paid Indians, $276, making a total of $11,065.52.

The following approximate amounts were earned by these Indians in 1899-1900, which did not pass through the agent's hands, consequently the total is over and above the amounts entered in the cash-book :

Indians as scouts, N.W.M. Police, $2,000 ; butchering contractor's cattle, $400 ; rounding-up ranchers' cattle, $700 ; freighting done for outsiders and work done on the Mormon irrigation ditch, $1,750 ; private hay sold on permit, $1,557, making a total of $6,407.

Grand total of earnings, $17,472.52 ; add annuity, cash, &c., $7,112.50, making a total of $24,585.02.

These sums have been received and spent by these Indians during the past fiscal year, much of it on pleasure wagons, saddles, fine furniture, tea, tobacco, canned stuff, clothing and a good sum for lumber, shingles and to reduce their indebtedness for wagons, mowers, rakes and harness purchased.

Industries.—The chief industries, other than cattle-raising, consist of hay-making and freighting coal, and I have shown the extent of these in my remarks on the cash-book.

Although these Indians are always ready to work with their teams for money, they are backward in making improvements in their homesteads ; scarcely anything has been done to them since my visit to each house last January, when the houses numbered one hundred and sixty-five.

Two or three of the Indians have small gardens, but, as the department is aware, the Indians here have no taste at all for agriculture and as even gardens are seldom successful among the whites without irrigation, but few people attempt them. The Indians follow the custom of the country and buy canned stuff instead when they have money to do so.

Sanitation.—The houses I visited this year were reasonably clean and not too bad as to ventilation. The door-yards were cleanly swept and rubbish put out of sight. I did not meet with a serious case of illness, although I saw several who had the appearance of not being strong, but they declined having the doctor to attend them when I asked if I should send him to see them.

Death of Head Chief Red Crow.—The demise of Head Chief Red Crow at an age that his usefulness, humanly reckoned, had many years to run, is much to be regretted from a department point of view. He lived a good life and was always on the side of the agent in plans for the progress and prosperity of his Indians. He retained the respect of his band for his authority in a remarkable degree, and when he was convinced a thing was right to do his counsel and voice carried the band with him.

Agency Headquarter Buildings.—Some of the old log buildings are becoming shaky, and unless the department wishes a general renewal of them all at the same time, each year something more than has been done should be done in the way of renewals and repairs.

At each successive inspection of the Blood agency I find progress in the condition of these Indians ; they never become indifferent, have always work on hand to do, and evince interest and energy in performing it. This is owing to the fact that Agent James Wilson, being a business man, has the forethought to look out for profitable teaming and hay contracts for them. He has established for them a reputation for promptness and faithfulness in performing any work they undertake to such a degree that merchants, ranchers and others prefer employing them. I was present at settlements between the agent and his Indians of hay and coal contracts on several occa-

sions ; each Indian receiving his share *pro rata* according to the quality and quantity of his work. The confidence with which each Indian accepted his share was proof to me that Mr. Wilson enjoys their fullest faith in man's honesty to a remarkable degree. Any one who can hold business relations with Indians in which cash settlements come in, as Mr. Wilson has done, for a dozen years or more, and still retain their good will, proves that he is a straight man, and of great integrity. Only one familiar with the Indian character will give this statement the full value that it deserves.

PEIGAN AGENCY.

I visited and inspected the Peigan agency in January and again in May.

Staff.—R. N. Wilson, agent ; John Hollers, clerk ; R. H. McDonald, stockman; Tom Scott, interpreter.

I took stock of the provisions, groceries and clothing in the storehouse ; checked the store ledger containing the different accounts of the same, and found the balances on hand in all accounts to be correct.

The bacon is of superior quality ; the flour is also satisfactory.

I also checked the invoices and bills of lading on file of goods received since my last inspection, and found them correctly entered up in the store ledger.

I checked the 'beef-book,' which contains the certified weighings of beef received from contractors and Indians, with the monthly provision returns and with the beef vouchers sent to the department monthly, and found the same to be correct.

Cash Account.—I audited the cash account from the date of my previous one, November 1, 1899 ; the account includes the business of the saw-mill as well as of the agency.

I followed the work down to April 30 last, and proved the balance, $1,033.07 to be correct and to agree with the balance shown by the bank pass-book on the same date.

I audited the Indian ledger, observing that each sum due any Indian was credited to the correct account.

Farming.—A larger number of Indians planted potatoes last spring than in any former year. Some of them had their own seed, while the others bought it.

Cattle.—On December 31, 1899, there were seven hundred and six head of cattle in the Indians' herd ; on the same date in 1900 there were eight hundred and eighty-six head ; in the meantime seventy-two head had been turned into the ration-house for beef.

Dwellings.—The Indians' houses are in fair order. I personally visited and inspected seventy-eight of them. The winter accumulation of garbage had been taken away, their appearance was creditable, and they showed progressive ideas ; they contain more new store furniture than when I last visited them, such as cooking-stoves, chairs, bedsteads, clocks, delf and cooking utensils.

The following named Indians are building houses, or, better still, are paying Carpenter Smith (a white man) and John Cotton (ex-industrial school pupil) to build them. These carpenters are working together on the different houses ; some of them are nearly completed :—Big Bull, house all lumber, modern style and finish; Gopher, ditto ; Commodore, ditto ; Little Leaf, ditto (in addition, Little Leaf's house has a deep cellar under the whole house built up with eighteen inch walls of solid masonry) ; North Peigan, ditto ; Man Who Smokes, ditto ; Bull Pen, ditto ; White Owl, ditto ; Many Sioux Medicine, ditto ; Yellow Robe, ditto ; Manyan, house of log walls, large, several rooms, shingled and otherwise of modern finish.

The following named Indians have stables and corrals that deserve special mention for being comfortable, strongly built and cleaned up after their winter's

occupation :—Lost, Baptiste, Many Sioux Medicine, Leo Smith, Little Leaf, Widow Many Chiefs, Big Swan, Prairie Chicken, The Rider.

Cattle.—Many Indians milk their cows, The Rider milking seven. This is not always a good thing, however, as they have to be watched or they will starve the calves, and then when winter comes the calves succumb through lack of vitality to stand the cold, brought about by the greed and indifference of their owners.

When I was at the agency in May, a series of preliminary domestic round-ups and branding of Indians' calves was being held on the reserve. I attended at some of them. I found the cattle generally were in good condition, there were many calves, and a prospect of many more.

The fifty-nine heifers received late the fall before had improved greatly with the spring grass ; seventeen of them had calved during mid-winter. Their calves were successfully reared, for which Stockman McDonald deserves great credit, as the mothers were both very young and very poor.

Seventy-five heifers were received in May from W. R. Stewart, Alberta. I am informed they were purchased in Ontario. As a lot they are unusually good animals. The bulls came safely through the winter. Seven new ones were delivered in May ; they were bred in Manitoba—all pedigreed animals. They will keep up the standard of quality of the range animals.

Agency Headquarter Buildings.—The old log buildings (residences of clerk, farmer or stockman, office, Indian council-room, drug shop, carpenter and blacksmith shop, bull stable) are all showing signs of decay in their foundations ; so also are the sills of the large frame storehouse.

Health of Indians.—The mortality among the children was unusually great. Many very young infants died unregistered in the annuity pay-sheets ; also several children in the Roman Catholic boarding school.

Head Chief Crow Eagle died during the winter ; he was an old man, but quite vigorous until a short time before his death. He had grippe, but pneumonia carried him off. He was a man of quiet disposition, intelligent, calm judgment, and reasonable. His influence was always for law and order, and to benefit his band, and to carry out the wishes of the department when they had been fully explained to him.

Saw-mill.—The working of the Indians' saw-mill makes this a busy agency. During the winter saw-logs have to be taken out of the lumber woods, and since April the mill has been running. The cut and finished lumber from then to May 17 was one hundred and thirty thousand six hundred and eighty-four feet. Some of this lumber was sold at the mill to ranchers, who came after it ; the remainder was hauled by the Indians to the reserve and to Macleod.

Taking out saw-logs in winter gave employment to forty-five Indians with their teams ; they did not work constantly, but quite as much as Indians will work in winter. Commencing in April, seventy-five different Indians with their teams and wagons have had employment, on and off, hauling lumber from the mill to the agency headquarters, to Macleod and to their own homes.

The working staff of the saw-mill consists of a manager, an engineer, one sawyer, and two other white men as edge-saw and tail sawyers ; in all, five white men and seven Indians are the gang it takes to keep the saw-mill running full blast, ten hours each day. The daily cut of finished lumber seems to be about six thousand five hundred feet.

I made a careful audit of all the saw-mill accounts, and found them correct and all cash received properly accounted for.

General Remarks.—The affairs of the Peigan agency are in a prosperous condition ; Agent R. N. Wilson is a business man, which is synonymous with industry and energy ; he is a good accountant, and his intimate knowledge of the Blackfoot tongue is a safeguard against being deceived in his dealings with his Indians.

HOBBEMA AGENCY.

I commenced my inspection of the Hobbema agency on June 13, and completed it on the 28th. Staff, W. S. Grant, agent; J. T. Fleetham, clerk; Henry Blanc, interpreter; Ewan Moore, farmer; Gilbert Whitford, farmer; John Donaldson, miller and blacksmith.

Office.—I audited the several books and accounts, and the cash-book, since my inspection a year ago.

Cash-book.—I followed each entry in the cash-book, both debit and credit, finding vouchers for each one to June 30, proving the balance of $10 to be correct.

The accounts of implements, tools, harness, food supplies, live stock, ammunition, twine, clothing, office furniture, were audited and proved correct, and the balances on hand in store agreed with those brought down in each account in the store ledger. The office work is most efficiently performed by Mr. Fleetham ; he keeps all his work up, not only to date, but up to the hour of his quitting work each day ; the storehouses under his charge are models of neatness, and he should share with the agent in the honour of a well-conducted agency.

Cattle.—I had round-ups of all the cattle in the agency ; they were very carefully done, into four different corrals, on the several reserves, occupying the most part of a week. All the calves were branded, the individual Indian brands on the cattle identified, and the cattle reclassed ; the number on hand aggregated nine hundred and twenty-two head.

Farming.—The Indians of these bands are very good farmers, they had in crop on the different reserves, four hundred and sixty-two acres of grain, and forty-eight acres of potatoes, turnips, and gardens. In addition to the above, the agent and farmers had in crop on agency account, fifty acres of grain and fodder, and four acres of gardens.

I visited every Indian farm; good fences are a noticeable feature. I found the crops good, the fields generally were free from weeds, the old land where weeds flourished had been abandoned, and new land taken in; the gardens were well cared for.

Nearly every Indian family was living in tents ; by so doing their houses are but temporary refuges during midwinter, and in consequence they are not made as comfortable and home-like as they should be, and their tents are often pitched far away from their farms, so that these have not the daily oversight of the owners. The migratory habit would be curtailed were good water provided by sinking wells near their dwellings.

Agency Headquarter Buildings.—The agency office and farm buildings are in good repair, excepting the foundation logs of the office. The agency premises are well and neatly fenced, the large gardens of the agent, clerk and interpreter are models to copy from ; they show what can be grown where a few years ago was sterile prarie or hog pasture. Two large fields of oats put in by the agent are excellent, one of them is laid down with brome grass.

New cattle corrals for holding the cattle at round-ups, with branding chutes, have been built at the agency headquarters, and at the farm on Ermineskin's reserve, with large yards in connection, so that cattle can be held for a day or two when there is a general round-up.

The bad places in the roads on the reserves have been bridged and turnpiked ; this has proven to be an excellent work, and makes driving about the different reserves practicable in a wet season, as this one has been.

Flour and Saw-mill.—A run of new burr mill-stones has been placed in this mill ; they are a great improvement over the Waterous vertical mill-stones, but they require a more scientific miller than the latter.

This spring back-water on the turbine water-wheel has prevented the mill from running.

The new granary attached to the mill is finished, and will prove most useful as a storehouse for Indians' wheat, which will be left there (each lot in a separate bin) until ground into flour.

Agent Grant continues to hold the full confidence and respect of his Indians ; he is indefatigable in his efforts to promote their interest ; early each morning he will be found out among his Indians on one or another of the different reserves, overlooking and practically demonstrating how work should be done ; later in the day, in his office counselling the Indians and settling disputes, which are of common occurrence among Indians, who do not read newspapers to divert their minds from petty domestic squabbles. The measure of success that he has already attained in bringing these Indians to their present prosperous condition is evidence that he is pursuing a proper course, and that the department made a wise selection in sending him to this important agency, where the knowledge of diversified farming that he possesses is necessary to success.

General Remarks.

The department, the government and the country are to be congratulated upon the success met with in bringing the Indians of Alberta to ther present state of good citizenship. Their industry and freedom from cirme are remarkable ; some boyish pranks landed a few of them in the Northwest Mounted Police guard-room, but nothing serious has occurred to mar the general harmony.

This satisfactory condition causes the executive officers to view the result of their work with much pride, being as it is (under departmental favour) due to their wise discretion in managing these formerly nomadic horse-stealing Indians.

I have. &c.,

T. P. WADSWORTH,
Inspector of Indian Agencies.

Northwest Territories,
Qu'Appelle Inspectorate,
Fort Qu'Appelle, Sept. 16, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit my sixteenth annual report of my inspection of agencies and reserves in the Northwest Territories from August, 1900, to September, 1901.

CROOKED LAKE AGENCY.

This agency was inspected on August 21, 1900, and following days.

J. P. Wright, agent ; J. W. Jowett, clerk and warehouseman ; H. Cameron, interpreter and teamster ; J. Sutherland, engineer, miller and blacksmith ; J. Pollock, farmer reserve 71, 72 ; Peter Hourie, farmer reserve 74, and reserve No. 73 is attended to by the agent himself.

The agency buildings and surroundings were in good order, some improvements had been made on the clerk's house.

The crop put in in this agency was five hundred and twenty-five acres of wheat, one hundred and fifteen of oats, and nine of roots, but owing to unfavourable wea-

ther, hail-storms and excessive rains during harvesting, the results were disappointing. Haying was also interfered with. In many cases I noticed where hay had been cut in sloughs and piled in cocks, the sloughs were full of water and only the tops of the cocks could be seen. However, efforts were put forth to secure hay at other points so as to have feed for winter.

One hundred and two acres of new breaking had been done, and one hundred and fifty acres of summer fallowing.

After auditing the various books and taking inventories of all property in the warehouse and in use at the agency and farms, I transferred the agency from Mr. J. P. Wright to Mr. Magnus Begg, on September 1, Mr. Wright leaving for Fort Frances agency, vacated by Mr. Begg.

The cattle records called for seven hundred and forty-four head, and there were rounded up seven hundred and twenty-seven head, and the other seventeen would, no doubt, be forthcoming when winter stabling had been completed. The cattle were all in good condition.

Some pretty new fields were noticed on reserve No. 74, and the ploughing was well done, furrows being straight and uniform.

The new house for the farmer for Bands 71 and 72 was nearly completed, it is situated in the centre of these two reserves, and will be more convenient to the work than the old house.

Since my last visit here a church has been put up on Reserve No. 72, near the present farmhouse by the Rev. Hugh McKay, of Round Lake mission ; it is a neat little building, 50 x 30, stone foundation, lathed and plastered inside, and rough-cast outside, good floor, shingled roof, log walls, logs standing on end, and is substantial. The church will hold one hundred persons comfortably.

Indians hauled the stone and lumber, and the value of this work was equal to sixty dollars. The women helped also, one woman gave three dollars. Services are held every Sunday and the Indians attend very well, and are much interested in having a church they can call their own.

A pleasing feature is that the building is free of debt, and a balance left over is to be used to build a shed and stable, also to purchase a stove.

The farmhouse on 74, Mr. Hourie's, had been partially repaired, and more was to be done the following year.

Chief Nepahpenice, Band 73, built a good new house for himself, also stables, and gave his old homestead to his son-in-law.

The crop of potatoes on the four reserves was fair, but turnips were a failure.

The usual sports took place the day after treaty payments, and they passed off very well. I suggested to Mr. Begg to try and get up an exhibition to take the place of horse-racing, &c., and let the Indians compete for prizes for the best-kept gardens, fields, neatest houses, also in cattle, sheep, pigs, poultry and the women in needle-work, knitting, bread and butter-making, &c.

The Indians regretted losing Mr. Wright ; they said he made them work too hard sometimes, but it was for their good, and they hoped they would get along as well with Mr. Begg.

There are a great many transactions in this agency of one kind and another, and it is important that Indians' private dealings with the agency should be at all times ready for explanation, when required by an Indian, and prevent misunderstandings, and I am glad to be able to give Mr. Jowett full credit for having every detail written up in an intelligent shape. The old system of rationing is done away with, except in cases of old women, cripples, &c., but no able-bodied person gets any relief without giving value for the same in work of some kind.

The health of the Indians at the time was good, and the Indians were courteous and agreeable.

BIRTLE AGENCY.

This agency was my next point, commencing my inspection there on September 11, 1900. J. A. Markle, agent ; S. M. Dickenson, clerk ; Alex. Caldwell, interpreter and teamster ; Thos. Ryan, farmer at Oak River.

My principal business here was to transfer the agency from Mr. Markle to Mr. Dickenson to hold and manage until Mr. Wheatley arrived from the Blackfoot agency, Mr. Markle going to Mr. Wheatley's place there. The transfer was made on September 20, after books had been checked, and inventories taken.

The crop put in in 1900 was the largest these Indians ever had, being one thousand three hundred and sixty-six acres of wheat (principally by the Sioux on Oak River, Oak Lake and Birdtail reserves), four hundred and ninety-one acres of oats, corn and barley and sixty-six acres of roots, or a total of one thousand nine hundred and twenty-two acres, but owing to unfavourable weather the results were not in proportion to the land under crop. The root crops were fair.

Some good houses had been put up during the year, always a sign of progress.

At the 'Birdtail' Moses Bunn erected a new house on a stone foundation, and he did all the work himself. The house is 16 x 21, shingled roof, good floor and windows, and he proposes building a stone stable, as he feels he is an expert in masonry work.

Bokpa and Mrs. Blackface have each money in the bank with which they intend to improve their dwellings.

At Waywayseecappo's reserve several new improved dwellings have been erected.

The chief has a log house, shingled roof ; Norman Brandon, John Baptist, Joe Meecas, Keewaytincappo, each a new house, Manitou Wigwam had material on hand for completing the annex to his house.

The Indians of this band also subscribed liberally towards the new Presbyterian church, the walls of which were already up and a shingled roof put on.

On Keeseekoowenin's reserve, also known as Riding Mountain, George Bone erected a new log house, shingled roof, and when completed it will have a living room and two bed-rooms on the ground floor, and three bed-rooms upstairs.

Joseph Boyer and David Burns have each purchased land off the reserve, Boyer a half section and Burns a quarter section. Boyer resides on his new place and had a good crop.

At Rolling River, a number of improved houses have been put up, all having shingled roofs. At Oak River, one new frame house, and at Oak Lake a good many improvements have been made.

At Valley River, the chief, John Rattlesnake, put up a new implement-shed, where all implements are kept under cover, so that progress can be noticed all along the line. Many of the Indians replace their farming implements which have got worn out, thus enabling them to better gain their own livelihood, instead of depending on gevernment help. This agency holds the banner position as regards being self-supporting. The total number of the various bands is about one thousand, and the issues in the way of relief for the year were less by fifty sacks of flour, and one hundred pounds of meat. These Indians were not going into debt and they owe less now than ever before. The drinking habits of some of these Indians are not on the increase, but the agent says a constant watch is necessary.

Universal regret was expressed at Mr. Markle leaving them, and numbers were daily calling at the office to know if it was true. The clerk, Mr. Dickenson, is ever attentive to his duties and is most careful and painstaking in his work, and I felt that the agency affairs would be faithfully performed by him until Mr. Wheatley arrived.

I left on September 22, for Yorkton, and was present at the weighing of some eighty head of cattle of Swan River agency Indians, and settling for the same, each Indian being paid in cash, the proceeds of his stock sold, and on 27th I proceeded to Swan River agency, now named, properly, 'Pelly agency.'

The Indians on this occasion spent part of their money in purchasing flour and dry-goods, and returned at once to their reserves, and I did not see or hear of one of them being the worse of liquor.

PELLY AGENCY.

I commenced my inspection on September 28. W. E. Jones, agent ; F. Fischer, clerk ; Peter Brass, teamster ; David Porter, labourer.

My principal business was to take the agency over from Mr. Jones, and hold it until Mr. McKenzie from Duck lake would arrive, and Mr. Jones was going to replace Mr. McKenize at Duck lake, consequently checking the books and making out inventories were the first things to attend to. These completed, I relieved Mr. Jones on October 6, and he left the agency on the 7th, and I remained in charge until November 8, when I transferred all over to Mr. McKenzie, he having arrived on November 2. The crop put in was reported to be about two hundred acres, but owing to poor farming, bad fencing, coupled with, it was said, dry weather, the yield was poor, in fact in some cases, none at all ; the best fields I noticed were those of the graduates of Regina school. The potato crop was fair, gardens were a complete failure, in fact, they were totally neglected.

It may be said that farming and gardening in the past in this agency have been only in name, and it is now to be hoped a new departure will be made, and crops raised like other agencies. There was no new breaking, and only a small patch of summer-fallow.

The cattle were looking fine and the number, after deducting eighty head sold, was eight hundred and thirty-three, and calves of 1900 to be added, would make a total of one thousand head.

The hay put up totalled two thousand two hundred and sixty-six tons, and about sixty loads of straw, and with careful management it was thought this would enable the herds to come through, if the winter was not a long and severe one. The office work was well done by Mr. Fischer, who I consider one of the ablest officials in the whole service, and there are none superior to him as an intelligent interpreter.

On November 9, I left the agency for Yorkton, and on the 11th I left Yorkton for Fishing lake and Nut lake, and after inspecting these places, I left on 20th for Touchwood agency, arriving there in the afternoon of the 21st, where I got a telegram from the Commissioner to proceed to the Regina industrial school, owing to the death of Principal McLeod. By travelling all night I reached Qu'Appelle station in time to catch the train, and was in Regina in time for the funeral on November 22. I checked all the books and took an inventory of all property, and transferred the whole over to Mr. Alex. Skene, acting principal, on December 29, and on January 3, 1901, I left Regina for the Assiniboine agency, arriving there on January 4. Reference to Fishing and Nut Lake reserves will appear in my notes of Touchwood agency later on, and Regina school will be shown in regular school report.

ASSINIBOINE AGENCY.

This agency was inspected on January 4, 1901, and following days.

Thos. W. Aspdin, farmer in charge ; Daniel Kennedy, interpreter, teamster and general assistant ; Eahsappy, mail-carrier.

The agency headquarter buildings were in good order. Timber was on the ground to repair the warehouse, the agency kitchen had been sheeted with dressed lumber, new fencing and gates had been made, and added to the appearance of the place. The crop put in was about two hundred and thirty acres of wheat, oats and barley, and twenty-six acres of roots and gardens. Owing to high winds and dry weather the

grain crop was a failure, only some two hundred bushels having been harvested, seven hundred and twenty-five bushels of roots were also put away for winter use, six hundred tons of hay had been stacked, most of it at the barnyards ; the hay was of poor quality, owing to wet weather in securing it ; the cattle were eating it, but it had not the nourishing qualities of hay properly cured.

Each house and stable on the reserve was visited, and with one or two exceptions, all were found comfortable, more so than I ever found them.

The cattle were looking well at the time ; the herd numbered one hundred and twenty-five head as against one hundred and three a year ago.

Six new houses had been built during the year, one for Daniel Kennedy, a story and a half, shingled roof and neatly finished.

Five new stables had been built also, of a large and better kind than the old ones.

Eahseakan, or Sautleaux, No. 94, has a double house, bedsteads, tables, chairs, cook and box stoves, nice tidy place, stables enlarged during the year, neatly fitting doors, has nine head of cattle, horses, poultry, &c.

Geegus has also a double house similarly furnished, has good stables and takes care of twenty head of cattle for himself and two relatives.

Chas. Rider and Medicine Rope have both good houses, shingled roofs and iron top chimneys. Medicine Rope added a wing to his house during the year, and purchased the lumber himself.

The wells have proved a benefit to the Indians, fifteen are giving supplies.

Thirty-five acres of new land were broken and fifty-eight acres summer-fallowed and some fall ploughing was done.

Five miles of wire fencing had been made, inclosing a pasture for the cattle.

Notwithstanding the poor crop, I consider the band has made progress, the health of the Indians at the time was good, and the Indians, one and all, were pleasant and in the best of spirits, and no one complained. The Presbyterian mission, conducted by Mr. and Mrs. McKenzie, was visited, and progress was reported, the attendance at Sunday services being regular. The usual audit of the books was made and inventory taken. Mr. Aspdin keeps his office work up to date and is generally correct in his accounts.

On January 12 I left for Indian Head, and on 14th proceeded to Fort Qu'Appelle, where I was detained by storms, and on 21st I left for Touchwood agency to complete inspection commenced in November.

TOUCHWOOD AGENCY.

H. Martineau, Indian agent ; J. H. Gooderham, clerk and in charge of Gordon's reserve ; Stanislaus Young, interpreter and teamster ; Edward Stanley, farmer, Poorman's and Day Star reserves ; P. J. Hamilton, farmer, Muscowequan's reserve ; Chas. Favel, farmer, Fishing and Nut Lake reserves.

The agency buildings were in good repair, and the surroundings were clean and tidy.

Poorman's reserve was the first visited, Mr. Stanley, farmer in charge, every house and stable on the reserve was visited, and all were found to be in good order, houses clean and stables roomy, and water convenient for the cattle at all points. A blacksmith-shop had been fitted up and Jim Worm, one of the band, was doing good work in making repairs. The crop put in was thirty-five acres of grain and six of roots, and there were harvested one thousand one hundred and twenty bushels of oats and five hundred and twenty-three bushels of roots, a good deal of new fencing had been put up, thirty-seven acres of summer-fallow had been done. The cattle were looking well, the herd numbered two hundred and seventeen head, six hundred and twenty-five tons of stacked hay. The farm buildings were in perfect order, a new horse stable 22 x 18 feet having being built during the year by Mr. Stanley, assisted by the Indians ;

hayloft, and a harness-room, stalls, floored with hewn lumber, a new stable also for the bulls of this and Day Star's reserve, six in all, the stable is 20 x 20. The Indians were in good spirits and were preparing to put in a larger crop in 1901. The English Church mission is conducted by the Rev. Mr. Bassing, who visits the Indians regularly in their own houses. Signs of progress were to be seen on this reserve, and Mr. Stanley was leaving no stone unturned in order to help the Indians to become self-supporting, and to be independent of outside relief in the way of food supplies.

Day Star, No. 87, also under the charge of Mr. Stanley, was next reached. Houses here were found neat and cleanly kept, stables in fair order, but some of them require renewing. The crop here was only four acres of oats and six of roots, results were one hundred and sixty bushels of oats and four hundred and sixty-nine bushels of roots. The herd numbered two hundred and twenty-two head, and cattle looking fairly well. Kinequan, a leading Indian, promised to put in a crop of oats this year, if he could get seed, and others would follow. This Indian had some fine bob-sleighs made by himself, ready for ironing. He sells them to other Indians. This reserve was in a position to make a better showing in crops and in cattle. The hay put up was scarcely considered sufficient, and probably a few would be short before winter was over.

Gordon's reserve was next reached. This is the banner reserve of the agency, and was holding its own very well, at the same time the want of a farmer constantly amongst them was to be seen. The crop was in the hands of only a few, fifty-three acres of wheat and oats, and five and a quarter of roots, one thousand six hundred and twenty-five bushels of first-class oats were harvested and four hundred and thirty-four of roots, nearly a thousand tons of hay were stacked, and it was thought there would be sufficient for the large herd, three hundred and sixty-one head ; efforts were to be made to get more of the band to go into farming.

Mr. Gooderham is energetic, and no doubt under him this band will do better in this respect.

All the houses and stables were examined, and many of them are large, airy and well furnished, and stables are of a good class. Josiah Pratt, a headman, was preparing to burn a kiln of lime and he would sell to other Indians.

Muscowequan's reserve was the next reached, and improvements were noticed here. P. J. Hamilton is farmer in charge. The farmhouse was almost completed, some plastering inside being required, it is a warm comfortable house.

The crop here was fifteen acres of oats, yielding one hundred and seventy-five bushels, and potatoes and turnips, three hundred and twenty bushels, gardens were a failure ; five hundred and ninety-four tons of hay stacked, and this was the best hay in the agency. The cattle were in fine condition, and the herd numbers two hundred and eight head ; a number of new houses with shingled roofs had been put up, also some very good stables and sheds. Mr. Hamilton was making a specialty of the cattle industry, more of his Indians were to try farming.

Fishing Lake Band.

This reserve was visited on way from Yorkton, W. Favel in charge. The farmhouse was in good order, and Mr. Favel had put up during the year a small storehouse.

The crop consisted of potatoes only, forty bushels harvested for the farmer, and thirty for the Indians. The Indian houses were tidy and clean, and stables were put in order for the winter. The cattle of the two bands numbered one hundred and fifty-three head ; one hundred and seventy-two loads of hay had been stacked.

Nut Lake Band.

This reserve is fifty miles further up. One man, Little Cree, had a new house, 20 x 20, and a good stable, and sixteen head of cattle, these are included in the total of one hundred and fifty-three, and he had plenty of good hay ; another Indian had a

new house alongside, but had no cattle. Little Cree had a small garden, but there was little or no crop. I told Mr. Favel to try and get all his Indians at both places to make a beginning to raise oats. Three miles farther on there is a little village of five or six houses, and on the way the old house of Chief Yellow Quill is to be seen. Little Cree had a mower and a rake. The total number of cattle in the agency was one thousand one hundred and eighty-eight, as against one thousand one hundred and thirteen a year ago, the increases from births and replaces being nearly balanced by sales, killed for beef, and deaths, missing, &c.

The office work was being well attended to by Mr. Gooderham, who was ever on the move in keeping things in good order.

Mr. Martineau, the agent, was energetic and seemed anxious for the welfare of the Indians and the advancement of the agency in general, and was ever courteous and obliging in his dealings.

The births during the year were fifty-three, and deaths thirty-four. The health at the time was fairly good, and a few cases were being attended to by Dr. Carthew.

Some cases of whisky-trading had been dealt with by the agent, and the guilty parties were heavily fined, which had a good effect, as no other cases have been heard of since.

The usual audit of the books was made, and inventories taken, and statements, with detailed report forwarded to the Commissioner, Winnipeg.

On February 15, I left for Fort Qu'Appelle, and on the 27th commenced the inspection of the industrial school, and on March 12, I returned to the Fort, and on the 13th proceeded to Muscowpetung's agency with the view of getting the books checked, and ready for the inventory of transfer of the agency to Mr. Graham. I then proceeded to File Hills agency and on March 21 and 22, in company with Mr. Graham, counted all the cattle at File Hills, before they left the stables. We then returnd to Fort Qu'Appelle on March 23, and on the 25th we went over Pasquah's reserve and on the 26th the Sioux reserve and Piapots and ranches 27 and 28, and Muscowpetung's on March 29, counting the cattle at each place. The transfer of the agency was made on March 30, Mr. Graham accepting the various inventories made up to March 31.

The staff of the Muscowpetung agency previous to transfer was : J. A. Mitchell, agent ; Geo. McNabb, interpreter and teamster ; Hugh Richardson, clerk and farmer, Muscowpetung's reserve ; D. J. Grant, farmer, Piapots ; S. Hockley, farmer, Pasquah and Sioux reserves ; D. J. Finlayson, in charge of the department ranch.

Piapots, No. 75, had one hundred and twenty-one acres of grain in 1900, but the yield was poor, only fifty-seven bushels being harvested, and roots fifty-eight bushels ; thirty acres of new land had been broken ; the herd numbered one hundred and thirteen head, and there appeared to be hay enough; the houses had been whitewashed with white clay and they looked clean and tidy ; one man, a graduate, was building on the bench or high land.

The ranch was in good order and cattle came out right in numbers, one hundred and seventy-two head, including eight horses. The hay supply was sufficient.

Pasquah's Band.

This is the banner reserve of the agency, as regards good houses, stables and nice fields. The crop put in was two hundred and fifty-two acres of grain and seven of roots, results were six hundred and forty-eight bushels of wheat and three hundred and eighty-eight of oats, and six hundred and fifty-five of roots, forty acres of new breaking and thirty-five of summer-fallow.

The Sioux Indians under Mr. Hockley get nothing in the way of help, but they are industrious and are good workers, and they live comfortably, and are always cheerful and pleasant. Their crop was one hundred and seventeen acres of grain, and fourteen and a half of roots, and they harvested two hundred and thirty-five bushels of wheat, oats and corn, one thousand one hundred and thirty-seven bushels of potatoes, and

four hundred bushels of turnips and garden stuff. The herd numbered fifty-one head ; fifty acres of new breaking had been done and ten and one-half acres of summer-fallow. It was reported that more dancing was going on than was desirable, and steps were taken to stop this.

Muscowpetung Band.

The reserve of this band was about the same as formerly, houses had all been whitewashed with white clay, and they were clean and tidy inside and out, the houses on this, as well as on Piapots, although comfortable, are, as I have previously reported, of an inferior class, owing to the scarcity of larger timber on the reserves. The cattle were looking well after the long winter, showing that they had not been neglected, the herd numbered one hundred and fifty head. The crop put in was one hundred and thirty-one acres of grain, one and one-half of roots, results almost nil, grain, fifty-eight bushels, roots sixty-eight bushels ; thirteen and one-half acres of summer-fallow, and fourteen of new breaking were reported, a few new houses were built during the year and a few stables and older ones enlargd.

Cattle.

The total number of cattle in the agency, including ranches, was six hundred and seventeen. Cattle sold brought $3\frac{1}{4}$ cents live weight for steers, $2\frac{1}{2}$ cents for oxen, and $2\frac{3}{4}$ cents for cows.

I furnished the Commissioner with a statement of the expenses of the ranch, and the cost of beef it supplied.

In justice to Mr. Mitchell I would add that he had his books and accounts all in first-class order, and was anxious to give all information required, and assistance in closing up the accounts. The individual earnings of the four bands, from December 1, 1899, to March 31, 1901, were $17,655.01.

Births from July, 1900, to March 31, 1901, were seven, and deaths for the same period, seven.

The doctor had been on the various reserves vaccinating those requiring this, and he reported the general health to be good. I found no cases of sickness in any of the houses I visited. These Indians are almost free of debt.

FILE HILLS AGENCY.

W. M. Graham, agent ; L. Ashdown, farmer ; Mark Ward, interpreter and teamster. The File Hill Indians had a most successful year, and consequently were in comfortable circumstances. The agency buildings and surroundings were in their usual neat and tidy condition.

A new granary had been built a short distance from the agency headquarters. It is 36 x 26, stone foundation, and divided into compartments. There is a new blacksmith-shop, and the blacksmith is a graduate of the Qu'Appelle industrial school, and he was doing capital work in repairing implements and having them ready for spring work. Besides repairs, many new articles are made, such as whiffletree-irons, clevises, &c. The stables and corrals for the bulls were well kept, and the bulls were in good order.

The crop put in on the four reserves, but principally on Okanase and Peepeekesis, was two hundred and thirty acres, and there were harvested seven thousand eight hundred bushels of wheat and oats, two thousand two hundred bushels of potatoes, one thousand five hundred bushels of turnips, besides garden stuff and a quantity of oats fed in sheaf.

The land ready for crop in 1901 was :—new breaking thoroughly back-set and harrowed, eighty acres ; summer-fallow, one hundred acres ; stubble land for spring

ploughing, one hundred and thirty acres, or a total of three hundred and ten acres. I drove over these fields before the big storm, and found them in good order for the seeder.

Four hundred and fifty acres of fencing, wire and willow pickets, and fifty acres of rail fence.

The Indians have purchased and paid for out of proceeds of crop : wire, value, $250 ; binder, $145 ; seeder, $125 ; four wagons, $268 ; mower, $50 ; twine, sacks, &c., $150 ; stallion, $150 ; threshing, &c., $177.75, and other amounts for furniture for their houses, harness, &c. Hay stacked, over two thousand five hundred tons, principally at the barnyards ; twelve steers were sold at $3\frac{1}{4}$ cents, live weight.

The fair was held on June 30, 1900, and was a grand success, and I referred to it in my last annual report. Preparations were being made for the one to be held in 1901. The women were busy making patch quilts, dresses, aprons, cushions and other articles, and they are always pleased to show me their handiwork. If the exhibition did no other good than give employment to these women during the winter, it would be serving a good purpose. How much nicer it is to find women employed in this manner than sitting on the floor with a pipe, gossiping with a few equally idle visitors ?

The cattle were counted from stable to stable ; total number, six hundred and sixty-six.

The books were checked up to March 31, and all balanced, and these, as well as those of Muscowpetung's agency were transferred into new books for the new Qu'Appelle agency to begin April 1, 1901, and the old books of the two reserves closed up. On April 17, I returned to Qu'Appelle, and on the 19th I left for Moosomin, on my way to Moose Mountain agency.

MOOSE MOUNTAIN AGENCY.

I commenced my inspection here on April 23, 1901. H. R. Halpin, farmer, in charge of Band No. 70 ; W. Murison, farmer at the western reserves, Nos. 68 and 69.

Agency buildings, stables, warehouse, &c., were in fair order, but required a little attention, also inside of agency house.

The crop put in on White Bear's reserve, No. 70, was reported to be about two hundred acres of wheat and oats, but results were poor, only two hundred and thirty bushels having been harvested ; no breaking or summer-fallowing had been done.

After the death of the old chief, White Bear, those living in the village, principally relations of the old man, moved off to a place about three miles further west, and located on the borders of a lake, near hay meadows and water, seventeen houses and fourteen stables were built, but stables are too low in the roofs and houses too small, and none had open chimneys. Efforts will be made to raise the roofs of the stables, and houses to have open fireplaces put in them all. Dr. Hardy was to make this his special duty, as he is the medical director of the reserve now. There is no excuse to offer, owing to scarcity of wood, as the houses are in the midst of pretty heavy timber.

The cattle were rounded up and a shortage existed, although the agent insisted he had them all. At a later round-up the shortage still existed.

At the western reserves, Nos. 68 and 69, the crop put in was one hundred and sixty-two acres, and three hundred and thirty-eight bushels of wheat were threshed.

The cattle were in fine condition, and none were missing ; the herds of the two bands were one hundred and sixty-seven head. Eleven new houses and six stables had been built during the year, in a well sheltered place in the bush, and near hay and water. Hay was left over from last year, and a good deal would be left over this year also. Mr. Murison and his Indians deserve credit for the good care taken of the cattle ; stables were visited regularly at night during cold and stormy weather. A lot of new breaking had been done, also summer-fallowing, but the land was not

required, as these two reserves were surrendered to the government this spring, and the Indians joined White Bear's band, and removed there in the end of April and beginning of May. This move is a capital one, and the Indians will now be much more easily managed than scattered as they were before, some thirty-five miles apart, and there is no better reserve than White Bear's, and with proper management, these Indians should not be a burden on the country for a dollar, as there is timber enough to sell, if nothing more, to keep them, and with a little drainage, they have the finest hay meadows in the country, and a good market for hay and wood within nine miles of a railway, and then money can be made from cattle, pasturage being of the very best. There are bright prospects ahead of these Indians if there is the proper head to direct them. The earnings of the three bands, from July 1, 1900, to March 31, 1901, amounted to $1,954.60.

On May 7 I left for Moosomin, and on the 9th left for Birtle, going across country, Mr. Halpin kindly driving me, and commenced my inspection on the 10th.

BIRTLE AGENCY.

G. H. Wheatley is agent, S. M. Dickenson, clerk, Alex. Caldwell, teamster and interpreter, E. H. Yeomans, farmer of Oak River reserve. I have not time to give details of the various reserves, many of them interesting, as showing progress. In company with Agent Wheatley, I visited every field and garden, and counted the cattle at the following reserves, and I generally found the Indians busy at their crops, and all in good spirits, and the cattle were found in very good order at that time of the year. The crops are well distributed among the Indians, that is, nearly every Indian has a field or more of grain, and all have a garden and potatoes.

The total number of cattle in the agency was six hundred and fifty-six head, and the increase of calves for 1901, which is a good one, to be added.

Gambler, Old Reserve.

John Tanner is the only one left, and he is independent of the government, and is making progress. He has a good house, comfortably furnished, also good outbuildings. He had in crop thirty-eight acres of wheat, twenty-four of oats and one of garden and potatoes. He had twenty-four head of cattle besides ten calves of 1901, seven horses, including a stallion, four pigs, and eight poultry. He has a gang-plough, a self-binder, a seeder, a faning-mill, a mower, a horse-rake, a buggy, a cutter, a bob-sleigh, a buckboard, a double wagon, besides harness and small tools and implements, all private property and paid for.

This is about what any Indian can do, if he has the energy and enterprise.

Birdtail Band.

These Indians are industrious. They had a pretty hard winter, but by selling wood they managed to eke out a living without calling on the agent. They have all comfortable houses and they take quite an interest in their little church ; a meeting is held every Tuesday evening, and the one we attended was quite interesting ; many of the Indians took part in the service by engaging in prayer, and the singing by men and women, old and young, was very fine and hearty.

The following is a sample of one farmer, Sunkawowaton, who has a new house in a pretty location, shingled roof, square hewn logs, upstair rooms, house well furnished. He had ninety acres of wheat, five of oats and one of potatoes, as pretty fields as could be seen on any white man's farm, and a great deal better than on many of them. He has two binders, one seeder, one roller, one wagon, one democrat, one sulky-plough, one disc-harrow, one set bob-sleighs, all his own and paid for, and this is no spoon-fed Indian either.

Rolling River Band.

Considerable advancement could be noticed among these Indians, more going into farming, and many building better houses. Mr. Wright, the missionary, is doing capital work here, in advising and helping them in farming and house-building. They have had two exhibitions, both a success, and were preparing for another in 1901.

John Bird had a nice house with three rooms downstairs and an upstair flat, shingled roof, trees planted around his house, showing good taste, new stable, and did all the work himself.

The cattle were looking well and were correct in number.

Keeseekoowenin's reserve was up to its usual mark of excellence, probably the most advanced reserve in the whole Indian work. The old chief is nearly blind, but he is always pleased to be called upon.

John Bone built a large new house, and added a new stable to his old ones, 18 x 20, a new granary, and was building a house, 14 x 16, for his daughter, Mrs. Lacree.

Oak River Band.

These Indians are doing well under Mr. Yeomans, whom I consider a capital man for the place. I am pleased to hear that these Indians are harvesting the largest crop by double, that they ever had. Two new frame houses were added during the year. The Indians were all pleased to be called upon, and they pay considerable attention to what is told them.

Oak Lake Band.

These Indians had a good crop, well put in. Mr. Yeomans gives them a visit now and again, and they have also the benefit of the example and advice of Rev. John Thunder, the missionary on the reserve.

Waywayseecappo's Band.

These Indians had more crop in than ever before, and I found them breaking more land ; a good many new houses had been put up, and others were getting out logs. It is a good sign to see an Indian wanting to live in a better house.

The small-pox was completely stamped out, and the health of the Indians was good. I believe two deaths resulted from the small-pox.

Manitou Wigwam, in addition to a fine house and good outbuildings, had sixteen acres of wheat, looking fine, nine acres of oats and one acre of potatoes. The roof of his house was painted red, gables yellow, and the window frames blue. The house had storm windows, curtains, three rooms downstairs, besides a lean-to kitchen. He has a large pasture-field with a two-string wire fence, and was breaking up a new field. He has good heavy horses, four cows, and makes butter, which he sells to other Indians.

Valley River Band.

This reserve was the last place visited, and it is eighty miles from Birtle, and not the best of roads, that through about twenty miles of tall trees, where the sun never got near the trail, the road was bad ; however, we made wonderfully good time, and when we did get to the reserve, our horses were nearly eaten up and got fairly wild from mosquitoes, flies and 'bull-dogs,' but by smudging we managed to exist until we got out of the place at four o'clock one morning.

These Indians had some nice gardens, about the first they ever had. The cattle were looking well, and came out right in number.

The Indians were in good spirits, and seemed to be comfortably well off. I had a message from Rev. Prof. Hart to say that he hoped a missionary would be sent to them this summer, which the chief and his men were glad to hear.

On July 2 I left Birtle, driving to Moosomin, and drove to Moose Mountain agency on July 4 and remained there until August 19. My principal business was to make up a statement of the affairs of the agency, cattle, &c., and to put Mr. Murison in charge, in place of Mr. Halpin, who retired from the service.

I transferred the agency to Mr. Murison on July 24, who managed the operations of the agency with considerable ability, and on August 19 the agency was retransferred to Mr. Short, as farmer in charge, and Mr. Murison will superintend the farm work, cattle, &c., and Mr. Short will, it is supposed, attend to the office.

From August 20 until 26 I was on special business at Grenfell, Broadview and Crooked Lake agency; and on August 27 I went to Brandon industrial school, where I remained until September 10, and came on to Fort Qu'Appelle on September 12.

The whole respectfully submitted.

I have, &c.,

ALEX. McGIBBON,
Inspector of Indian Agencies.

NORTHWEST TERRITORIES,
REPORT ON TREATY No. 8,
REGINA, September 19, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—After completing arrangements for the treaty trip, I left Edmonton on March 30 last. Owing to the early breaking up of the ice, the trip was very difficult and I was eight days late in reaching Lesser Slave lake. I am pleased to be able to report, however, that I was at every other point on the date fixed for the payment of annuities. The number of Indians paid was three thousand five hundred and seventy-five, showing an increase of two hundred and fifty-two over last year. The number of births during the year was one hundred and twenty-four, and the deaths numbered one hundred and twenty-one.

The health of the Indians was generally good, with the exception of the Chipewyans, who were afflicted with severe influenza. Dr. Edwards gave them medical attention. There was no small-pox until we reached Athabasca landing, and the efforts of Dr. Edwards in vaccinating the Indians should result in the prevention of the spread of this disease.

The Indians were quite successful with their hunts last year, and with the exception of those who wish to stay on the reserves being surveyed at Lesser Slave lake, they will continue for many years to lead the lives of hunters. There is no demand or pressing need for the setting apart of further reserves.

I append a list of tools and implements asked for by those under the treaty who purpose building houses and cultivating garden plots.

The supplies furnished under contract for the Indians during treaty payment were in every respect satisfactory.

I had not time to have the census sheets given me filled in, I accordingly left them at the different points to be filled in.

I have to report that the Indians of Lesser Slave lake and Lake Sturgeon represented that it would be much better if they could be paid their annuity in the winter

so as not to interfere with their spring hunt. The Indians at Wabiscow had no complaint to make as to the date, but they are so situated that a winer payment would be more convenient, The Indians of Fort St. John gather there towards the end of May, and it is suggested that June 1 would be the best date for payment there. After careful consideration, I have come to the conclusion that it would be more to the interest of the Indians, and also less troublesome and expensive for the authorities, if provision were made for the payment of the Indians at Lesser Slave lake, Sturgeon lake and Wabiscow in the winter, say Wabiscow on the 19th, Lesser Slave lake on the 26th and Sturgeon lake on December 31. The winter trip could be cheaply and expeditiously made and the treaty officer could return, make his report and go back so as to be at St. John about June 1. He could then proceed down the river, paying at Dunvegan, Peace River landing, Vermilion, Little Red river, Chipewyan, Fond du Lac, Fort Smith and Fort Resolution. From St. John the trip would be entirely by water and could be so arranged that the officer could avail himself of the steamboat service provided by the Hudson's Bay Company between Forts Resolution and Smith, and Forts Smith and McMurray. Fort McMurray could be paid as he returned to Athabasca landing.

I have, &c.,

H. A. CONROY,
Paying Officer.

MANITOBA AND NORTHWEST TERRITORIES,
OFFICE OF THE INDIAN COMMISSIONER,
WINNIPEG, October 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report for the past year upon Indian affairs in Manitoba and the Northwest Territories.

The work in my office is generally so pressing that I am unable to visit agencies and reserves as often as I could wish. Such visits, however, when made, being for a special purpose, afford me little opportunity of judging whether there is progress or retrogression on the reserves. On details of this kind the inspectors report to you pretty fully, and it is unnecessary to repeat their remarks. It remains for me, therefore, only to deal with some special occurrences, and to touch upon the four leading features of the department's work for the Indians, namely, their advancement in self-support, sobriety, morality and education.

VISIT OF THEIR ROYAL HIGHNESSES.

Their Royal Highnesses the Duke and Duchess of Cornwall and York visited Winnipeg on September 26, ultimo, and during the ceremonies at the formal opening of Manitoba University building, forty-two of the boy pupils of Middlechurch industrial school, who, on the suggestion of Principal Dagg, had been given a place on the programme by the committee of arrangements, performed very creditably under com-

mand of drill instructor Burnham, certain exercises, which consisted in a variety of evolutions with fixed bayonets. Following the drill, Chief W. H. Prince, of St. Peter's band, and some of his councillors, were presented to the Duke and Duchess.

But the principal event in connection with the visit of their Royal Highnesses, which I should notice, because it is of historical importance, is the Indian demonstration in their honour which took place at Shaganappi point, Calgary, on the 28th of the same month. Pursuant to your instructions, I arranged for a meeting of the Indians of southern Alberta on the date mentioned. Including the school children, nearly two thousand were in attendance. A platform was erected at a suitable point on the ground, and on this platform a marquee was placed, over which in front was painted the Blackfoot word 'Kitaisimatsimpmon,' meaning 'We greet you,' and on the other side, over the entrance to the marquee, the word 'Welcome.' And while the programme was being gone through, the royal standard floated over the Duke and Duchess.

First came the presentation to their Royal Highnesses of the head chiefs of the several bands, in the order in which they appear below on the address, each as he approached being graciously greeted by a shake of the hand.

Then the address of the Indians was read in a distinct and creditable manner by David Wolf Carrier, a Sarcee pupil of the Calgary industrial school, and is as follows :—

'To His Royal Highness George Frederic Ernest Albert, Duke of Cornwall and York, Duke of Rothesay, Prince of Saxe-Coburg and Gotha, and Duke of Saxony ; Earl of Carrich and Inverness, Baron of Renfrew and Killarney, Lord of the Isles and Great Steward of Scotland, K.G., P.C., K.T., K.P., G.C.M.G., G.C.V.O., LL.D., D.C.L., &c., &c.

'May it please Your Royal Highness.

'We, the Blackfoot, Blood, Peigan, Sarcee, Stony and Cree Indians of southern Alberta, heartily welcome your Royal Highness to the land of our forefathers. For untold generations our tribes hunted the bison on the plains of this country as our means of subsistence. But the white man came and desired to settle on our hunting grounds, which were already becoming depleted of their large game, principally by the reckless slaughter of the animals south of the boundary line. Consequently, about a quarter of a century ago we accepted the terms offered us by the government of Canada, and surrendered our lands by treaty to Her late Majesty Queen Victoria, whose death we deeply lament, and of whom you are the illustrious grandson.

'At the time we entered into treaty with our Great Mother, we pledged her our allegiance and loyalty ; and during the rebellion of 1885 in this country, we refused to bear arms against our gracious Sovereign.

'On the auspicious occasion of this visit of your Royal Highness, we beg you to convey to your highly exalted father, King Edward VII., the same expression of devotion to his person, and loyalty to his government, which we promised to his Royal Mother.

'Under the fostering care of His Majesty's Department of Indian Affairs we are gradually adopting the civilized mode of living, and are acquiring cattle and other means of obtaining ample subsistence and comfortable homes.

'It affords us unfeigned pleasure to acknowledge the high honour which Her Royal Highness the Duchess of Cornwall and York has done us by accompanying you on this memorable visit, and in conclusion we fervently pray that you both may be spared to accede in due time to the throne of your distinguished ancestors, long to reign over us, our children, and the other many peoples of the British Empire, in peaceful security and abundant prosperity.

'Signed on behalf of the above mentioned Indians by

his
WHITE PUP, X Head Chief of Blackfeet.
mark

his
RUNNING RABBIT, X Head Chief of Blackfeet.
mark

his
IRON SHIELD, X Head Chief of Blackfeet.
mark

his
CROP EAR WOLF, X Head Chief of Bloods.
mark

his
DAY CHIEF, X Head Chief of Bloods.
mark

his
RUNNING WOLF, X Chief of Peigans.
mark

his
BULL'S HEAD, X Head Chief of Sarcees.
mark

his
JACOB BEAR'S PAW, X Head Chief of Stonies.
mark

his
JOHN CHENEKA, X Head Chief of Stonies.
mark

his
JONAS BIG STONY, X Head Chief of Stonies.
mark

his
JOSEPH SAMSON, X Head Chief of Crees.
mark

his
MISTER JIM, X Head Chief of Crees.
mark

'Witnessed in the presence of

DAVID LAIRD,
Indian Commissioner for
Manitoba and the Northwest Territories.

'CALGARY, Northwest Territories of Canada
September 28, 1901.'

Short speeches were then made in their own language by head chiefs, one only speaking for each band. As interpreted, the speeches were in substance as given hereunder :—

White Pup, head chief of Blackfeet, told their Royal Highnesses that he hoped they would live long on this earth, and that this was the first time it had been his privilege to meet the Queen's grandson.

Crop Ear Wolf, head chief of the Bloods, presented the treaty made twenty-seven years ago, and he said that the paper was first given to Red Crow, but afterwards it was given to him. For twenty-seven years nothing went wrong when Queen Victoria was over them. He never calculated on having the ground he was living on made smaller to him. He said that Red Crow told him that when the rivers went dry that is the time they would not get anything more to eat. He trusted their Royal Highnesses would take pity on them all the time. The Queen had never had any wrong words with them.

Running Wolf, chief of the Peigans, said that he wanted His Royal Highness to see that they were as well treated as before. He loved the cattle now, but he wanted more weight, and he wanted bigger horses. He said they would never get tired of living on the earth, and they had always tried to get along as well as they could. They always looked to their agent for what they wanted, and he helped to keep them straight. They never had anything to say except what their agent told them. They got all the materials that they wanted.

Bull's Head, head chief of the Sarcees, asked their Royal Highnesses to take pity on them. The Sarcees were very glad when they heard the Duke and Duchess were coming, and had been waiting for them. Again, he asked them to take pity on their children, and see they could get their living. He said their Royal Highnesses had come a very long way, and wanted to know if the earth would be any different here from what it was there. He (Bull's Head) told them that he had received a medal (which he displayed) from Commissioner Laird, and that he was not ashamed of it. He also said that all the Indians around wanted to have lots of grub to make them feel happy when they started for home. He said that was the only thing that kept them alive, having plenty to eat.

Jonas Big Stony, one of the head chiefs of the Stonies, said : 'Thou are the great son of a great King ; I, who am representing the Stonies, say "Welcome" to you to-day, and I also feel that the land we are living in bids you welcome, and your illustrious wife. I feel full of gratitude to you, and I desire that you will bear our greetings to the great King your father. We will hope that the condition of things now obtaining, peace and prosperity, will continue as long as the heavens and the earth, and in gratitude, I again take your hand.'

Joseph Samson, head chief of the Crees, who the Duke remarked was a young man, and who had lately become chief through the death of his father, said that he was 'grateful to the Great Spirit for this occasion, and for giving us this brightening day, and all that is peaceful and blessed. The sun above now is breaking through the clouds and gladdening us with his presence.' He went on to say : 'This is the first time that I have beheld such a crowd of people mingling together in peace, and I am thankful. And I am grateful that we live under one great flag in our great empire, and with one great law controlling all of us. I am thankful to the Great Spirit on the occasion of the hoisting of this flag, which is a token of peace and goodwill among men. Though we are a poor and feeble people, yet, nevertheless, our hearts are rejoiced on the occasion of your arrival amongst us ; and as it has been the case that our fathers made peace with your government, so we hope that this will continue perpetually in the future. We want to be at peace with the white man in every respect. We all send through you our greetings to the great King, your illustrious father.'

His Royal Highness the Duke of Cornwall and York then made the following gracious reply to the address and speeches of the Indians,—

'Chiefs and men of the great Blackfoot confederation, Sarcees and Stonies and Crees,—

'I have listened with much pleasure and satisfaction to the loyal words of greeting of your address. And I shall hasten to convey to my dear father, the great King, your assurances of loyalty and unswerving devotion to him and his government. I thank you very much for the welcome you have given to the Duchess and me in words that come warm from your hearts. We know of your affection for the beloved Queen who is no more, the Great Mother who loved you so much, and whose loss makes your hearts bleed, and the tears to fill your eyes. We know this not alone from your words, but from the steadfast loyalty you displayed at the time when there was trouble in the land, and when ill-advised persons sought to sow disaffection amongst you. They failed to do so. The attachment you then showed to the Great Queen has never been and never will be forgotten. The Great King, my father, still cherishes the remembrance of your fidelity in those sad days, and it is a source of satisfaction and gratification to His Majesty that now, as then, he can regard you as faithful children of the grand Empire of which you form a part.

'I am glad to learn of the prosperity that now surrounds the Indian's teepee, and the beautiful and abundant crops, the herds of cattle and the bands of horses. Those of you who remember the day the government of the Great Mother first came to you, or have heard with your ears what your fathers have said, will recollect that your people were often hungry and wretched, their pipes cold, and their tents melancholy. You know that you did not cry to deaf ears, but the Great Mother listened to you and stretched forth her hands to help you, and now those sad days have passed away never to return.

'You asked also of the Queen that your children should be educated, and the presence here to-day of the children shows how wise you were in preferring that request, and how faithfully and generously your desires have been met. There are few things that have interested me more in this my journey across the British Empire than meeting these young Indians. I am pleased to notice the advances they are making in that civilization that increases the happiness of every man, woman, or child that comes within its influence.

'You may still have wants, such is the lot of every one on this earth, but your requests will always be patiently listened to by those who have been set by the King amongst you. The Indian is a true man, his words are true words, and he never breaks faith. And he knows that it is the same, too, with the Great King, my father, and with those whom he sends to carry out his wishes. His promises last as long as the sun shall shine and the waters shall flow. And care will ever be taken that nothing shall come between the Great King and you, his faithful children.

'I have spoken to you as children of our great Empire. I know that its flag floats on your tents, and that you wear the King's colours. I feel that your generous hearts have already told you that it is no mean thing to be part of such an Empire, and to share in its glories, its liberties, and its privileges. As you know, it is an Empire on which the sun never sets, but rising or setting shines on the subjects of the Great King, and I wish to assure you that His Majesty, your Great Father, has as much love for you of the setting sun as of his children of the rising sun. We are glad to have seen you. We have come a long way, many thousands of miles across the deep waters and the vast prairies to see you. We shall always remember this day with pleasure, and I will only add a prayer, and that prayer is, that with the help of the Great Spirit, peace, prosperity, contentment and happiness may be your lot, and rest among you always.'

The Duke closed with the following remarks :—

'From the warmth of your reception I feel that you also will long remember this day. The Great King has ordered a silver medal to be struck to commemorate the day, and one medal will be presented to each of the Head Chiefs which shall always be kept by him as long as he remains in office, and afterwards by his successors. I wish you good-bye, and hope you will all return in safety to your homes. I have arranged that

you will be supplied with provisions during your stay here and until you are at home again.'

About two hundred pupils from the Indian industrial schools of Calgary, Dunbow, and Red Deer, and from the Morley, Old Sun's, Crowfoot and Sarcee boarding schools, in clean neat attire, and accompanied by their principals, stood in a semi-circle behind the chiefs, in front of the platform. The contrast between them thus dressed and bright-looking, and their seniors in their old-time trappings, was marked, and showed to some extent what the Canadian government is doing for the rising generation of Indians. At the conclusion of the Duke's reply to the Indians, these two hundred children joined in singing 'God Save the King,' and then gave three hearty cheers for the King and three for the Duke and Duchess of York.

This ended the programme proper, and as soon as it was finished, the mounted Indians performed a series of evolutions on horseback which were skilfully executed and picturesque in effect. The reporter of the Winnipeg Free Press says :

'The scene when their Royal Highnesses took their departure beggars description. Surrounded by an escort of the Northwest Mounted Police they passed through thousands of people, both red and white. The smoke was curling from the teepees, the papooses were still crying and the dogs still snarling. Away across the plains for miles could be seen hundreds of people making their way back to Calgary, which lay spread out in the distance. The sun was shining brightly and the hundreds of brilliantly garbed Indians dashing past on their ponies or circling round made a picture which will doubtless never be seen again.'

In making the necessary preparations for the demonstration, I was ably assisted by Agent Markle, of the Blackfoot reserve, and Agent Sibbald, of the Stony reserve. Messrs. James Wilson, R. N. Wilson, and A. J. McNeill, agents, respectively of the Bloods, Peigans and Sarcees, also aided in assembling the Indians, counselling them, and seeing to their early return to their reserves. Inspector Saunders of the Mounted Police did valuable service in selecting the ground, and Inspector Wilson in directing the Indians where to encamp and in marshalling them for the demonstration. About two hundred police formed the escort to their Royal Highnesses, and their presence and splendid evolutions added much to the brilliance and interest of the scene.

Head Chief of the Peigans.—Crow Eagle, the head chief of this band, died of lung trouble on March 25 last. Having been authorized by the department while at Calgary to appoint a successor to the deceased chief, I proceeded thence to the Peigan reserve, where I held a council with the Indians on September 30. Upon inquiry, ascertaining that Black Plume, an upright and progressive member of the band, was perhaps the most suitable one to be their head chief, I proposed him, and asked if there were any objections to his appointment. No opposition was offered to him ; on the contrary, Bull Plume, one of the minor chiefs, remarked : 'I have nothing to say against it ; nothing can be said against Black Plume. He is the friend of white men and Indians, men, women and children. He is good-natured, cool, young and wise.' I accordingly appointed Black Plume head chief of the Peigans, upon condition that he make the usual declaration before the agent required by the department, when he will be given the medal and other insignia of office.

Health.—The health of our Indians has on the whole been good during the year, although small-pox, which has been so prevalent throughout the Dominion, broke out on a number of our reserves. It was traceable in every instance to visitors who had contracted the disease across the international boundary, or from friends who had lately been there. In the Birtle agency, on Waywayseecappo's reserve, two cases proved fatal, owing to the delicate health of the Indians when they were taken down with the disease. At the Pelly agency the family of Joseph Genaille, consisting of three persons, had small-pox. All recovered. The man is non-treaty and was employed as labourer on the reserve. At Touchwood Hills agency seven cases occurred in two houses—no deaths. At Onion Lake agency there were thirty cases in the Church of

England boarding school and several on the reserve and at Frog lake. Strange to say, at Onion lake there was only one death from ths disease, that of a half-breed child two years old. At Saddle Lake agency there were three cases, and Edmonton agency eleven cases on Alexander reserve, none of which proved fatal. At Hobbema agency, there were seven cases in Ermineskin's boarding school, three cases on the reserve, six cases in the Red Deer industrial school, and a number of cases in the settlement adjoining the reserve ; but the patients all recovered. At Crooked Lake agency, Sakimay's reserve was quarantined for what was said to be an outbreak of chicken-pox. During the time the quarantine continued the medical officers of the department were in attendance. Hospitals were established, and where necessary nurses sent in. I am pleased to report that the precautions taken were completely successful and the disease stamped out at every point.

Self-support.—If the quantity of supplies issued to destitute Indians be taken as the criterion of how far short they are of being self-supporting, there is not much marked improvement to note. This, however, is scarcely a fair standard of judging their position. While only a few of the bands of the plain Indians in the Territories are self-supporting, most of them are living much more comfortably than in former years. They are better clothed and housed, and not a few of them have furniture, horses, harness and wagons, earned by their industry in cutting hay for their cattle and for sale, and by freighting. This improvement in their circumstances is a great gain, for it makes them more healthful and contented. In a few years as their herds of cattle and other means of living increase, it is hoped that the vote for supplies to them will correspondingly decrease.

Our Indians who live near lakes or forests have all along done most for their self-support. By trapping, fishing, and in some cases raising vegetables and keeping a few cattle, or cutting lumber, railway ties and fire-wood, they earn a fair livelihood. In New Ontario during the year, the Indians have profited largely by the railway construction in progress through that country. On Lake Winnipeg a number have earned a good deal by fishing, and are not so destitute as they were a few years ago. The only region where serious want has been reported is among the non-treaty Indians of Ile à la Crosse and Oxford House district in Keewatin. In the latter region it is reported that from fourteen to twenty Indians died of starvation in the winter or early spring of 1900, somewhere in the neighbourhood of God's lake and Island lake, but so distant from the Hudson's Bay Company's nearest post that the fatalities had occurred before assistance could be forwarded. This loss of life was caused by a dearth of rabbits, the failure of the usual migration of deer from the north, and a scarcity of fur-bearing animals. Last winter, it is not reported that any deaths resulted from want of food, as game was more plentiful. Steps have been taken to guard against such a serious contingency in future by arranging that relief shall be provided when serious destitution is heard of within practicable reach of a post.

Among the plain treaty Indians and the Sioux, those in the Birtle, Qu'Appelle and Crooked Lakes agencies have attained the nearest to self-support, as only their widows, sick and aged require any food supplies. Mixed farming is their main reliance. The Blackfeet, under Agent Markle's skilful management, have taken a step forward, and not a few of them have taken heifers to care for. The Bloods and Peigans are likewise increasing their herds of cattle. In short, the great hope for our plain Indians in the matter of self-support is in agriculture and stock-raising, the prospects of which industries among them I will briefly deal with under separate headings.

Agriculture.—Our Indians have participated in the bountiful harvest this year in Manitoba and the Territories, which has been so fully commented upon by the press throughout the Dominion. The result of the yield will be more plainly seen in future agricultural operations, as an Indian has to realize the benefit of his labour in any occupation to steadily continue at the work. On the more advanced reserves, the Indians will have a large quantity of grain to market after providing for their own requirements. In the past, the great difficulty has been to keep the Indians at

work ploughing summer-fallow at the proper time. The most trifling excuses are taken advantage of to put off the work, consequently too much is left to do in the spring with the result that it is late before the seeding is completed.

The hay supply this year will be ample. In some districts the meadows were flooded and did not dry out during the season ; but on the other hand the crop of upland grass was of first quality and with the straw from the grain an abundant supply of fodder will be available.

Stock.—This industry is in a thriving condition. The cattle wintered well on the reserves, and the natural increase during the year has been highly satisfactory. Several hundred head of heifers were sent into the reserves in Alberta this spring to meet the demand of Indians anxious to commence ranching, and it will require a good number annually for several years before the reserves are fully stocked.

The breeding of a better class of horses on the reserves is now receiving the attention of the department. A Clydesdale stallion was supplied the Blackfoot agency this year. A breed of horses not so large would perhaps be better adapted for the Indians. An all-purpose horse crossed with their ponies would produce a class that would be useful to them in freighting and travelling, and at the same time command a ready sale. With the fine pasturage on most of the reserves, there is no reason why horse-raising should not become an important means of improving their circumstances.

Sobriety.—Too many Indians, like some other people, are only sober when they cannot procure intoxicants. The law against selling or giving liquor to Indians is stringent enough, but the difficulty is to obtain reliable evidence to secure convictions.

In all the small towns that are springing up near reserves, intoxicants are sold, and somehow, either directly or through middlemen, not a few Indians procure strong drink. There have been a good many convictions for drunkenness during the year, which is having a wholesome effect in checking the evil ; but though a large number of illicit sellers have been prosecuted, the proportion of convictions has not been as great as could be desired. It seems to me that if a special detective or two were appointed by the department to watch liquor dens and prosecute all discovered offenders against the intoxicant clauses of the Indian Act, much more would be accomplished than at present to promote the sobriety of the Indians.

I fear also that the Indians of the north are being more or less demoralized by traders taking in and selling to them essences and pain-killer, which contain such a large percentage of alcohol as to render them intoxicating. Essences are not required by Indians for the ordinary purposes common in civilized society, and they might be included among the prohibited articles in the Indian Act. As for pain-killer, it should be tested, and prohibited if it contains over a certain percentage of alcohol.

Morality.—Marriage in proper legal form is becoming more common among the Indians as missionary work progresses and pupils from the industrial and boarding schools settle down in life. Among the pagan Indians not much improvement in morality is noticeable. Polygamy is decreasing ; but wife or husband desertion is not uncommon. This is their method of divorce, and it is attended with even less ceremony than the easy forms in certain divorce courts of which one often reads. In cases of desertion, the agents generally withhold annuity payments for the benefit of deserted wife and children. This being a disgrace is somewhat of a deterrent ; yet the evil is too prevalent. When separation takes place, other alliances generally follow ; but as seldom any ceremony is observed, prosecution for bigamy would be unavailing.

Female child-marriage is to some extent practised among the Blackfeet, Peigans and Bloods. It is detrimental to the health of the women and equally so to that of their offspring. The influence of agents and missionaries, and a greater knowledge of the disfavour with which the practice is looked upon by white men, may in a few years make the Indians ashamed of it. But if the evil is not discountinued, prohibition may have eventually to be resorted to.

High crimes appear to be on the decrease among the Indians. There was one murder case during the year, namely, the charge of murdering her husband preferred against Mrs. Frog of Cross lake. After a protracted impartial trial before Judge Richards, of Winnipeg, at Norway House, the prisoner being defended by F. Heap, Esq., of West Selkirk, the verdict was 'not guilty.'

Education.—The experiment of assisting boy ex-pupils to commence farming on reserves has been successful. While visiting the Qu'Appelle agency towards the end of July last, I saw a number of boys from Qu'Appelle and Regina industrial schools at work, under the energetic supervision of Agent Graham, breaking up land on the reserve south of File hills. They had each prepared about thirty acres for crop and when this ground is seeded next year, if the season is at all favourable, these boys, after being given a few heifers on condition of returning in a few years an equal number to the department, ought to be in a position to fight the battle of life without further aid from the government. I would recommend that the system be extended to other reserves suitable for agriculture and stock-raising, as I am strongly of opinion that it will do more to popularize the industrial schools and solve the Indian problem than any other method of utilizing education that can be adopted. Such exhibitions, too, as the one held at File Hills this year and several previous years, are likewise a strong encouragement to industrious Indians, and a valuable means of education to all backward ones who are visitors on such occasions.

Industrial Schools.—The same number of these schools are in operation as last year, namely, ten. The attendance is 1,051, as compared with 1,048 in the previous year, a rather disappointing increase. Some of the schools have considerably increased their attendance, others have lost ground. One of the latter is St. Joseph's school at Dunbow. The Treaty 7 Indians do not take kindly to industrial schools, and it is particularly difficult to get girls there, as many of them marry when quite young. The Elkhorn school has made a gain, but recruiting is not as rapid as could be desired. It is noticed that the feeling of the Indians towards the Rupert's Land school has considerably changed for the better, whilst the St. Boniface institution experiences some difficulty in obtaining recruits. Fort Alexander Indians, who should sympathize with the latter school, prefer to keep their children at home in the hope of obtaining a boarding school, which has been denied them up to the present.

The health in these institutions has been fairly good, the number of deaths being reduced. The epidemic of small-pox has caused no little anxiety, past experience having shown that this disease is very destructive among the aborigines. Red Deer school was the only large school which had to be quarantined. It came through in good condition, as the disease was of a very mild type, some doctors claiming that it was only chicken-pox.

Gradually these large institutions are being provided with adequate fire-protection, and also with lighting apparatus. An electric light plant, with gasoline motor, gives full satisfaction at the Rupert's Land school. A similar system of lighting is about being placed in the Qu'Appelle school. There is an acetylene gas plant at St. Boniface, which gives tolerably good light, but the apparatus is not quite satisfactory.

Boarding Schools.—At present there are thirty-two boarding schools in operation. The Waterhen boarding school, Manitowapah agency, has been closed, the boarders having been transferred to Pine creek. The White Eagle and Old Sun's boarding schools are in process of amalgamation at the Old Sun's camp, Blackfoot reserve. This change will materially reduce the cost of maintenance, the staff being reduced, and less fuel required. A new boarding school has been opened near Thunderchild's reserve, Battleford agency.

The total number of boarders provided for at present in such schools is one thousand one hundred and thirty-five, with an actual attendance of one thousand one hundred and fifty-two, and accommodation at hand for probably two hundred or three hundred more pupils, as the majority of these schools have room, on an average, for

ten more boarders than are provided for in the estimates. In all of them full instruction is given in housekeeping, also farming and stock-raising on a small scale, besides the usual class training. In a few of the larger ones industrial training is almost on a par with that of the industrial schools proper. At Emmanuel college, Prince Albert, a limited number of pupils are trained as teachers.

The quality of the work done in boarding schools is excellent. Those comprising their staffs are generally fully qualified for their duties.

The boarding schools are, as a whole, more popular with the Indians than the industrial schools, because they do not necessitate sending their children any considerable distance. There are one hundred more boarders than there were a year ago.

Day Schools.—Since my last report the following day schools have been provided for, namely :—Stangecoming reserve, Couchiching agency ; Cumberland, Pas agency ; Lac la Ronge, Carlton agency ; Paul's reserve, Edmonton agency ; and Bearspaw's, Stony agency. Of these, about one-half only have actually been put in operation ; some of them doing well, especially the Stangecoming school.

Of the new school-houses provided for, there is one at White Bear's reserve, Moose Mountain agency, and another at Fishing lake, Touchwood Hills agency. Neither is erected as yet. A new school established last year at Swan lake, Portage la Prairie agency, is in operation, and is said to be doing well, though no returns have yet been received from the teacher. There were also three new schools established within the limits of Treaty No. 8, and I have every reason to believe that they will be successful. As a matter of fact, they have been in existence for some years past, but have been recognized only recently.

In regard to the general working of the day schools, in no case has there been retrogression, whilst at some points there has been a decided improvement. I have resolved upon the closing of two or three schools which are in a stagnant condition, unless there is an improvement noticeable within the current fiscal year. However, it must be taken into consideration that there are many circumstances which militate against a steady and large attendance at day schools, as the department is already well aware. I am glad to say, however, that the Indians are gradually remaining longer periods each year on their reserves, and that the teachers who have been appointed of late are generally of a higher moral and educational standing than heretofore, and consequently take greater interest in their work. These circumstances contribute to place these schools on a higher plane.

Surrender of Reserves.—Acting on instructions from the department, I proceeded, in March last, to Moose Mountain agency, and met the Indians of Pheasant Rump, Ocean Man, and White Bear's bands in council, and obtained a surrender to the government of the two former reserves, containing over forty-seven thousand acres, and the signing of an agreement between all three bands to amalgamate into one band and become equal sharers in the capital funds, and in what was formerly White Bear's reserve. The Indians of the two western reserves moved to the reserve at the agency about May 1, and put in some crop on the latter reserve. The move is a good one, as with the proceeds of the sale of the two western reserves, and the improved direct oversight the united band can receive from the agency, they ought to be scarcely any further burden on the department.

Staff.—The inspectors and most of the agents have done good work during the past year. The Calgary inspectorate has been abolished, and the work will now fall upon other shoulders. A capable Assistant Commissioner has been appointed, but being engaged in completing the half-breed scrip investigations, he has been unable to give much attention to the duties of his new position. With respect to my staff in this office, I have to report that their services continue to be highly satisfactory.

I have, &c.,

DAVID LAIRD,
Indian Commissioner.

BRITISH COLUMBIA,
BABINE AND UPPER SKEENA RIVER AGENCY,
HAZELTON, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith my annual report and statistical statement, also list of government property in my keeping, to June 30, 1901.

Location of Agency.—This agency is the most northerly situated, and is bounded towards the north and west by the Northwest Coast agency, towards the south by the Williams Lake agency, and to the east by the Rocky mountains.

For geographical reasons, distinction of separate nations and general characteristics, this agency is designated as under two divisions.

THE KITKSUN DIVISION.

The supervision of this part of the district begins from Kitselas canyon, the main point of difficulty for steamboat and canoe navigation on the Skeena river, and about ninety miles below this place, terminating beyond its head-waters, covering a distance of about one hundred and sixty miles.

With the exception of Kitwancool, which lies on the trail to Ayensk, Nass river, and Kisgegas, on the Babine river—three miles beyond its confluence with the Skeena—the other five villages, with their respective reserves, are situate upon the latter river, ending towards its source with Kuldoe, and in the following account will be dealt with in that order.

KITWANGAR BAND.

Reserve.—The reserve of this band is situated on the right bank of the Skeena, near the mouth of the Kitwangar river, with a timber reserve on the left bank of the former, forming a combined area of three thousand five hundred and twenty-nine acres.

Vital Statistics.—The population is one hundred and forty-eight, consisting of forty-six men, fifty-two women and fifty children. During the year there were five deaths and four births, giving a decrease of one.

Health and Sanitary Precautions.—The Indians enjoyed good health. Precautions are taken to have the premises and their surroundings kept clean, and a good many of the Indians have been vaccinated.

Resources and Occupations.—The principal resources and occupations of this band are fishing, hunting and trapping, and cutting cord-wood, while the women and children gather wild berries and dry them for winter use.

Education.—The school is under the auspices of the Anglican Church Missionary Society, and is centrally located in the village. The attendance is irregular, as school is open only part of the year, which applies also to those on other reserves, nevertheless the children are making good progress.

Religion.—A fine church has been built, finished and nicely equipped, including an organ. The building and furnishing was done by the Anglican Church Missionary Society. The church is well attended by the Indians.

Characteristics and Progress.—The Indians of this reserve are very intelligent, and have much bettered their condition in every respect. Their gardens are receiving more attention, and more land is being broken up.

Kitwancool Band.

Location.—The village of this band, for which a reserve has not yet been apportioned, is the only one of the Kitksun settlements removed from the river's proximity, and is situate on the right bank of Kitwangar river, twenty-five miles from Kitwangar, and four miles below Lake Kitwancool, and on the trail to Ayensk, Nass river.

Vital Statistics.—The population is sixty-four, eighteen men, sixteen women and thirty children. During the year three deaths and five births occurred, with a migration of four to Ayensk, Nass river ; the result is a decrease of two.

Health and Sanitary Precautions.—During the year there was no illness in this band. Sanitary measures are observed ; also vaccination is attended to.

Resources and Occupations.—The lake furnishes an abundant supply of salmon ; hunting and trapping bring fair returns, and the gathering of wild berries by the women and children.

These Indians work in the coast salmon canneries during the season, and hunt and trap during winter. In common with all the Kitksuns, they find some kind of useful employment.

Education.—There is no school in this village ; some of the children periodically attend school at Kitwangar, also at Kincolith and Ayensk, on the Nass river.

Religion.—There is no church here, and no missionary stationed at the village, but the people receive devoted attention in this respect in the last above-mentioned localities.

Characteristics and Progress.—The people are industrious, and in spite of their isolated condition have made great advances.

Kitsegukla Band.

Reserve.—Both the new and the old villages of this band are situated on the left bank of the Skeena, and the former nine miles above the latter. The area of the reserves is three thousand one hundred and three acres on both sides of the river.

Vital Statistics.—The combined population of the two villages is eighty-four, composed of twenty-five men, twenty-three women and thirty-six children. There were seven deaths, and six births, giving a natural decrease of one.

Health and Sanitary Precautions.—The Indians enjoyed good health. They kept their premises fairly clean, and many of the Indians are vaccinated.

Resources and Occupations.—Salmon fishing, hunting and trapping are the main resources of this band. The Indians work for the canneries of the coast, hunt, trap, and chop cord-wood.

Education.—There is a school located, centrally, in the old village. A native Methodist teacher instructs the children ; though very attentive to the pupils, their long absence accounts for somewhat slow progress.

Religion.—The Indians are taking an interest in religious teachings, and are nearly all adherents of the Methodist Church.

Characteristics and Progress.—A steady improvement is here apparent, and the people's steady progress is noticeable everywhere.

Getanmax Band, Hazelton.

Reserve.—The old village is situated on the left bank of the Skeena, and upon the rising ground towards the north of the Hazelton townsite. The intermediate space, dividing both at that point, is a distance of thirty-eight feet. The new Indian village

occupies, like the old, the same natural terrace intersecting the delta, but on the other end, with the right bank of the Hoquelget or Bulkley river as its terminus.

The total area of reserve land comprises, with the Tsitsks, or Hoquelget village reserve assigned to it, three thousand five hundred and seven acres.

Vital Statistics.—The population is two hundred and thirty-nine, consisting of eighty-one men, seventy-seven women and eighty-one children. There were ten deaths and eight births, making a decrease of two.

Health and Sanitary Precautions.—The Indians' health has been very good. Sanitary precautions are being observed. A good number of the people were vaccinated.

Resources and Occupations.—Fishing, hunting and trapping are the main resources, also the wild berry crop, which is gathered for winter use. On account of Hazelton being the terminus of all communication with the coast, and the consequent demand for labour, the Indians find employment, at good wages, in packing into the interior, boating, mining, sawing lumber, getting out cord-wood, and not a few are working about the canneries of the coast.

Education.—The school is carried on by the Anglican Church Missionary Society, assisted with the usual grant allowed by the government to day schools. In teaching the course prescribed by the department is followed. The result has beeen much better since the parents of the children are taking a livelier interest in having them attend. The school-house occupies the north end of the Hazelton townsite, in proximity to the old Indian village.

Religion.—Interest is taken in religious matters. A new church edifice was finished and furnished on the townsite, in which the Church of England service is being held.

Characteristics and Progress.—The Indians are intelligent, industrious and provident. They have acquired an aptitude for mostly any kind of work and are steadily employed for the season. Their earnings are judiciously invested where doing the most good, with a thought for the future.

Kispiox Band.

Reserve.—The village and old reserve are located about nine miles above Hazelton, on the opposite side or right bank of the Skeena, and on the left bank at the mouth of the Kispiox river. On the former bank of the Skeena, and about half way from here to Kispiox, is the Sic-e-dash reserve with the lower end on Alipagh creek.

The reserve area of Kispiox and the latter amounts to two thousand two hundred and fifty-two acres.

Vital Statistics.—The entire population is two hundred and twenty-five, composed of seventy-seven men, seventy-six women and seventy-two children. During the year there were nine deaths and eight births, giving a decrease of one.

Health and Sanitary Precautions.—The state of health of the Indians was very good ; the usual sanitary precautions are observed ; also some were vaccinated.

Resources and Occupations.—Hunting and trapping in winter, and fishing salmon are the main resources.

Many of this band go to work in the salmon canneries of the coast, also in the mines and do packing into the interior.

Education.—At the old village, school is being taught in a house, improvised for the purpose, at the extreme northern end of the village. When open, it is well attended and the pupils are making good progress.

At the new village of Glen-Vowell—holdings in severalty—on the Sic-e-dash reserve, a school-house, centrally located, was built, furnished and equipped during last February by the settlers (Indian) thereon with their teacher ; and school

was very successfully being taught up to May last, after tuition for two winters in the teacher's house.

The teacher of the former school belongs to the Methodist Missionary Society, and that of the latter to the Salvation Army.

Religion.—In the first above-mentioned locality a church is under erection and divine service is being held in a meeting-house. In the latter, a meeting-house also serves that purpose. Under both conditions, much religious zeal is shown.

Characteristics and Progress.—Though these people once were the most obdurate and refractory of any on the Skeena, they are the very reverse to-day.

They are enterprising, law-abiding and most industrious. I here may interpolate that the people of the new settlement—fifty-two all told—are inclusive of those enumerated under Kispiox, and combined, have given in every way a remarkably good account of themselves.

Kisgegas Band.

Reserve.—The village of this band is located about sixty-eight miles to the north of Hazelton, on the right bank of the Babine river, and three miles above its confluence with the Skeena. The reserve embraces both sides of the Babine river with an area of two thousand four hundred and fifteen acres.

Vital Statistics.—The population is two hundred and sixty, composed of eighty-two men, eighty-eight women and ninety children. There were five births and seven deaths, making a decrease of two.

Health and Sanitary Precautions.—The health of the Indians has been very good. Sanitary measures are observed, and a number of Indians and their children were vaccinated.

Resources and Occupations.—The resources of this band are, catching salmon, especially in the canyon below the village, hunting and trapping ; this band's hunting and trapping grounds extend far beyond the head-waters of the Skeena and Babine rivers, Bear lake, also to Stikine. These Indians mostly depend on their resources and till their potato-patches. The women, accompanied by their children, gather wild berries and dry them for winter use.

Education.—The school was established by, and is under the auspices of the Anglican Church Missionary Society, and has become endowed with the usual grant for day schools. The mission building used for the purpose is conveniently located southwest of the old village, almost adjoining it, and opposite a new village site, laid out by me. Though the attendance is still irregular, as on other reserves, owing to natural conditions, the children display an eagerness to learn, and have made good progress.

Religion.—The great majority of these people have accepted the Christian faith.

Characteristics and Progress.—These Indians are conspicuously intelligent and industrious, of a quality yet largely displayed on the hunting and trapping grounds. Those of the band with habitations about Bear lake only, seldom come in. The other portion of the people have made signal progress in tilling and breaking up new land every year and in improving their homes and general conditions.

Kuldoe Band.

Reserve.—The village of this band is situated on the right bank of the Skeena and is connected with Kisgegas, on the Babine river, by a very rough trail of about twenty-five miles across the mountains. The reserve contains four hundred and forty-six acres, almost equally divided in area on both sides of the Skeena, the latter intersecting it.

Vital Statistics.—The population is forty-seven, composed of fifteen men, sixteen women and sixteen children. There are no deaths or births to record.

Health and Sanitary Precautions.—The health of this people has been exceptionally good. Sanitary measures are observed and the people have been vaccinated.

Resources and Occupations.—The river furnishes a good supply of salmon. The large hunting and trapping grounds give large returns to so few people. The occupations, aside from growing potatoes and gathering wild berries for winter use, are only such fitting the resources.

Education.—There is no school at this village, but the children periodically attend that of Kisgegas.

Religion.—There is no church, but the people take an interest in Christian teaching, and what is stated of the school, as an alternative, equally applies to the church.

Characteristics and Progress.—The people are of a cheerful and obliging disposition ; though remotely situated, they do their best by taking great interest in their potato-grounds, the care of which, as in other localities already reviewed, rests with the children and the old people.

General Remarks.

The following applies to the bands of the forementioned division, collectively :—

Reserves.—The reserves of the division comprise an area of fifteen thousand two hundred and fifty-two acres. The bottom lands on the Upper Skeena at their varying widths according to the converging slopes of the mountains towards its banks, contain many fine stretches of good soil and natural meadows, covered here and there with balm of Gilead and poplar. The same features obtain along its numerous tributaries.

Vital Statistics.—The total population is one thousand and sixty-seven men, women and children. There is the slight decrease of nine for this year, without directly any special cause contributing to it, except a migration of four included, but no doubt it is largely due to the effects of the grippe, in a bad form, of a year or more ago.

Tribe and Nation.—The people are all of the Kitksun nation, the parent stock of the Tsimpsians, of the coast.

Health and Sanitary Precautions.—Much attention is being given to cleanliness of person, premises and their surroundings. As usual, many of the Indians—infants and adults—have been vaccinated and re-vaccinated. No visitation of any kind of contagion became apparent. Consumption among these Indians is not common, but rather exceptional, and the few cases occurring can be traced to the source previously stated ; since, however, the disease is highly contagious, special measures by way of best advice and instruction are carefully applied to prevent, as much as possible, its propagation.

Buildings.—The buildings erected and under construction are of modern pattern, with gable roofs and of two and more rooms, on dry and healthy ground.

Stock.—Horses and cattle wintered well and without loss. A great desire is making itself manifest among the Indians to possess themselves of cattle in addition to what they already own. This move is being greatly encouraged, and yet to a certain measure deferred where the conditions for its proper keep do not warrant undue haste.

Farming Implements.—The implements in use in this district are still .those of the kind most needed for clearing and gardening.

Education.—The schools are being better attended, and correspondingly better results obtained, greater interest is shown by the parents in having their children attend them.

Religion.—Allowing for old gregarious habits and the keeping up of old customs, it may be said that the people, generally, have embraced the Christian faith.

Characteristics and Progress.—The Indians are of a highly acquisitive turn of mind, industrious and law-abiding. Retrospectively considered, it redounds credit to their good sense, generally, that the former promiscuous giving of presents at feasts, in exchange for social recognition, is now found after all to be a painful delusive equivalent. From observation of facts, I strongly incline to the opinion that the settling of Indians on holdings in severalty is the fundamental requisite in making them independent and self-reliant, and happily the natural conditions of this agency as such as to favour the department's desire in that direction.

Moreover, already the push and bustling energy displayed in little settlements, in fresh and healthy localities, make the old villages look sleepy and desolate by comparison, their tall weather-stained *totems*, in impersonation of solitude, completing the effect.

Such being the diverse influences at work, the miscellaneous earnings by packing, mining and so forth, are invested by the Indians in the faith that they are laying up a future of more comfort and repose, on their holdings and in the embellishment of their homes. On the former are raised a sufficient amount of potatoes and vegetables to supply the latter. Thereby is asserted no little aptitude for mixed farming, which in itself is a step towards it, and shows the forecast of the work to become more general.

Temperance and Morality.—The Indians, partly from habits of providence and indifference to intoxicating liquor, are seldom found in quest thereof; moreover, as the reprisals in transgression regarding the same are immediate, they prove effective.

Concerning morality, generally, their conduct leaves little to be complained of.

HOQUELGET DIVISION.

Location.—The area under this division commences within three miles to the southeast of Hazelton, and runs in that direction for a distance computed at three hundred and twenty-five miles, and ends at Fort George, on the Fraser river.

In its radius are located seventeen villages under the Babine and Carrier groups, respectively. In addition to these, it contains two nomadic bands of Sikanees and two bands of Na-anees (semi-nomadic). They are all of the Roman Catholic faith, and belong to the Dini nation.

In proceeding with the following, I deem it admissible to reserve for the summing up in conclusion, remarks identical in features to all localities alike, without thereby detracting from the object in view here at issue.

Babine Group.

Hoquelget Band.

Reserve.—The village of Hoquelget or Tsitsk-kitskun appellation—is located three miles to the southeast of Hazelton, as the crow flies, on the lofty left bank of the Hoquelget or Bulkley river. The reserve comprises both sides of that river, and contains an area of four hundred and forty-three acres, which is assigned to the Getanmax (Hazelton) band, for reasons minutely given in my report of 1899.

Vital Statistics.—The population is one hundred and fifty-six, consisting of fifty-four men, forty-nine women and fifty-three children. There were three deaths and four births, giving an increase of one.

Moricetown Band.

Reserve.—The village of this band is situate on the left bank of the Hoquelget or Bulkley river, and at its main canyon. The reserve in area is almost evenly divided on both sides of that river, and contains one thousand six hundred and ninety-three acres.

Vital Statistics.—This band has a population of one hundred and fifty-nine, composed of fifty-one men, fifty-three women and fifty-five children. There were two deaths and four births, making an increase of two.

Fort Babine Band.

Reserve.—The village is situated on the right shore of the Babine lake, near its discharge, the Babine river, whereat a bridge, built by the Hudson's Bay Company, of about two hundred feet long, connects both banks of the former, with a reserve area of two thousand eight hundred and nine acres, partly distributed on each.

Vital Statistics.—This band numbers one hundred and forty-five, with forty-nine men, forty-eight women and forty-eight children. During the year there were three deaths from old age and natural causes, and three births.

Old Fort Babine Band.

Reserve.—The village and reserve are on the right shore of the Babine lake. The area of the reserve is one thousand three hundred and thirteen acres.

Vital Statistics.—This band has a population of one hundred and thirty-nine, composed of forty men, forty-two women and fifty-seven children.

General Remarks.

The remarks under the following headings apply to all of the preceding bands :—

Tribe.—They are the Dini, of the Babine group.

Health and Sanitary Precautions.—The Indians enjoyed excellent health, which, in a measure, atones for the sad affliction of the two Babine villages during last year.

Better sanitary measures are being observed generally, and some of the people were vaccinated.

Resources and Occupations.—The resources of the Indians of this group are hunting, trapping and fishing ; in all of which pursuits they engage. The Indians of the Hoquelget village and Moricetown follow packing with their horses, and mining to some extent. Only the Fort Babine men do some packing with their horses, and mining, being in direct line of travel to the crossing of Tatla lake for the Omincea.

The old Fort Babine is fourteen miles up the lake, and accessible only by canoe. There, when bringing home or taking off cattle, they improvise a contrivance somewhat in shape of a catamaran, by fastening together two canoes, parallel to each other—in breadth according to space required—platform it with slabs, and propel the same by sails. Thus equipped, I have met them going under sail, or by the use of long sweeps, from the portage, at the head of the lake, to the old Fort, a distance of eighty-nine miles.

Buildings.—None of the buildings erected of late years are of modern pattern, but they are in more suitable localities.

Stock.—Their stock wintered well, and without loss; also a fair amount of provender is being stored in fall in the way of hay, derived from the large flats on the margin of the lake.

Farming Implements.—There are no other implements approaching that description than such as used for gardening and clearing, and such as scythes and hand-rakes.

Education.—There are no schools, but by the Roman Catholic clergy the people have been taught the use of a syllabary, in their own language, a system widely used in the interior of British Columbia, as a means for communication and keeping their accounts.

Religion.—The people are all of the Roman Catholic faith, and have a church in each of their respective villages.

Characteristics and Progress.—The people are fairly industrious, abiding and faithful adherents of their church. They are constantly making headway in the right direction. They raise now all the potatoes, with some vegetables, for their own consumption, and are steadily acquiring more provident habits.

Temperance and Morality.—Under the first item of this heading little is to be said by way of complaint, and I can commend the people for their conduct, morally.

Carrier Group.

Yucutce Band.

Reserve.—The village and reserve are located at the head of Stuart's lake (Fond du Lac), on the intervening nine miles between Babine and Stuart's lakes, or portage. The reserve area amounts to eight hundred and sixty-five acres.

Vital Statistics.—This band numbers eighteen : four men, five women and nine children. There was one death and one birth.

Thatce Band.

Reserve.—The village and reserve of this band are situated on the left bank of Stuart's lake, and at the mouth and left bank of Thatce river, the latter containing one thousand six hundred and fifty-five acres.

Vital Statistics.—The population is forty-eight, consisting of twelve men, fifteen women and twenty-one children. There were during the year two deaths and two births.

Grand Rapids Band.

Reserve.—The village and reserve of this band are on the right bank of Thatce river, which at this point is commonly called Trembleur river. The reserve contains five hundred and eighty-four acres.

Vital Statistics.—The people number sixteen, two men, four women and ten children. No change in the population took place.

Tsistlainli with Tsisli Band.

Reserve.—The villages and reserves are at the head of Trembleur lake, and left bank and mouth of Tatlo river. The reserves contain nine hundred and eighty-nine, and forty-nine acres, respectively.

Vital Statistics.—The population of both bands is thirteen, consisting of four men, three women and six children. No deaths or births occurred.

Pintce Band.

Reserve.—The village and reserve of this band are on the left bank of Stuart's lake, and at the mouth and right bank of Pintce river. The reserve contains seven hundred and twenty-eight acres.

Vital Statistics.—The population numbers forty-five, consisting of twelve men, fourteen women and nineteen children ; there was one death and one birth.

Stuart's Lake Band.

Reserve.—The village and reserve are situated on the left shore of Stuart's lake, and near its discharge, Stuart's river. The area of the reserve is two thousand seven hundred and twenty-four acres.

Vital Statistics.—The population is one hundred and seventy-two, composed of fifty-eight men, fifty-five women and fifty-nine children. During the year there were two births and two deaths.

Fraser's Lake Band, including Stella.

Reserve.—The village of the former band with reserve, are located on the left shore of Fraser lake, and at its discharge, the Natleh river ; Stella, with its reserve, is on the other end of the lake, at a distance of nine miles, and on the right bank of Stella river, at its discharge into the forementioned lake. The reserves comprise an area of one thousand nine hundred and forty-nine, and two thousand and seventy-seven acres, respectively.

Vital Statistics.—The population numbers eighty-nine, composed of nineteen men, twenty women, and fifty children. There were six deaths and twelve births, giving an increase of six.

Stony Creek Band.

Reserve.—The village is situated on the right bank, and the reserve on both sides of Stony creek, down to its discahrge into Noolke lake. The reserve comprises an area of seven thousand four hundred and eighty-eight acres.

Vital Statistics.—The population is ninety-eight, composed of twenty-seven men, twenty-six women and forty-five children. There were five deaths and nine births, making an increse of four.

Fort George Band.

Reserve.—The village is on reserve No. 1, on the right bank of the Fraser river. No. 2, is also located on that side of the river. No. 3 is located on the left bank of the Nechaco river, with No. 4, on the latter's right bank, and also on the right bank and mouth of Mud river, one of its eastern affluents.

Vital Statistics.—The population numbers one hundred and twenty-two, consisting of thirty-eight men, thirty-six women and forty-eight children. There were during the year three deaths and three births, and no change is to record.

Tsistlatho Band (Blackwater).

Reserve.—Reserve No. 1, is situated on the right bank of the Fraser river ; No. 2, on the left bank of the Blackwater river, and No. 3, on the eastern shore of Nattesley or Bobtail lake ; and all amount in area to four hundred and nine acres.

Vital Statistics.—This band numbers seventy-six, consisting of twenty-four men, twenty-one women and thirty-one children. There were two deaths and two births during the year.

McLeod's Lake Band.

Reserve.—The village is situated on the western bank of McLeod's lake, and the reserve on both sides of Long river. This reserve contains an area of two hundred and eighty-six acres.

Vital Statistics.—This band numbers ninety-one, composed of twenty men, nineteen women, and fifty-two children. There was one death and one birth.

Outlying Band, Sikanees.

Location.—A nomadic band of Sikanees usually meets and camps about Fort Grahame on the Findley river during the winter.

Vital Statistics.—The band numbers ninety-five, consisting of twenty-seven men, twenty-five women and forty-three children. There were two births and two deaths.

Outlying Band, Sikanees.

Location.—Another nomadic band of Sikanees generally camps during winter on the western shore of Lake Connelly.

Vital Statistics.—This band numbers one hundred and eighteen : thirty-six men, thirty-two women and fifty children. There were reported of this band two deaths and two births.

Outlying Bands, Na-anees.

Location.—Two bands of semi-nomadic Na-anees, hunting and trapping to the north of Connelly lake, winter on that lake.

Vital Statistics.—These two bands aggregate in number one hundred and fifty-two, composed of forty-seven men, forty-four women and sixty-one children. According to best advices there occurred amongst them two deaths and two births during the year.

General Remarks respecting Hoquelget Division.

Reserves.—The reserves of this division comprise an area of twenty-eight thousand nine hundred and sixty-seven acres.

In passing through the Hoquelget or Bulkley valley—the best part of this district—in the direction of Fraser's lake, its most conspicuous features are the beautiful prairies of luxuriant grazing land. In their wide expanse, with now and then a lake, rolling and gentle slopes alternate in their general character with well watered vales, whilst groves of poplar and balm of Gilead enhance the whole, at intervals, with pleasing interchanges of their park-like effects.

Population.—The population of this division numbers one thousand seven hundred and fifty-two, showing an increase of thirteen over last year's count.

Tribe or Nation.—They are the people of the Dini nation, of the Carrier group. Though the Sikanees are somewhat regarded as a sept of their own, with hunting grounds from north of McLeod's lakes to the Rocky mountains, and to which the western Na-anees likewise belong, they can fairly be classed as belonging to that group and of the Dini nation.

Health and Sanitary Precautions.—The Indians are made aware of the necessity of general cleanliness and are mindful of it. Many have been vaccinated, and nothing in semblance of contagion became evident.

Resources and Occupations.—The principal resources of all the bands are hunting, trapping and fishing ; the Indians residing in villages also own more or less cattle and horses. At Stuart's lake (Fort St. James) and Fort George they earn some money by canoeing and boating, and in various other ways, with those of Stony creek. They also periodically attend to their garden patches, more or less to a fair extent.

Buildings.—All the houses built of late years are substantial and of modern style, and arranged with more thought for comfort.

Stock.—Their stock wintered without loss, and year by year better provision is made for its keep.

Farming Implements.—The implements used are still such as scythes and hand rakes with other tools useful in clearing and tilling garden land.

Education.—There are no schools on any reserves of this group and division, but the people have learnt to use the syllabic writing in their own language.

Religion.—All the Indians of the district under consideration belong to the Roman Catholic Church and are very devout in their religious observations, of whom those of the outlying bands are regarded as the most zealous. At Stuart's lake is a large church and a mission, and there are also churches at Thatce, Pintce, Fraser's lake, Stella, Stony creek, Fort George, McLeod's lake and Blackwater.

Characteristics and Progress.—The Indians, as a rule, are tractable in disposition, law-abiding and free from all former objectionable customs. They are expert in hunting, trapping and fishing. However, those of the outlying bands forbear to avail themselves of the latter for support, as they are averse to the fish diet, and principally subsist on fresh and smoked moose and cariboo meat. They are all undergoing a steady evolution of progress. By degrees they are enlarging their potato grounds and improving their yields by more care, concurrently, bestowed upon them ; and it is pleasing to reflect that, also in this respect, the outlying bands have made a fair beginning.

Of course in drawing inferences from comparisons, especially with the Indians of the first division, all due allowance must be made for the differences in the opportunities and surroundings of these ; however, where will and deed go hand in hand, the result cannot be otherwise than satisfactory.

Temperance and Morality.—With the exception of liquor occasionally finding its way from Quesnel to Stuart's lake village, no trouble is experienced anywhere else in this division ; and for moral conduct, also within it, I can highly commend the Indians.

General Remarks.

Population.—The population of both divisions—of one thousand and sixty-seven, and one thousand seven hundred and fifty-two, respectively—comprises a total of two thousand eight hundred and nineteen ; and with a slight decrease in the former and increase in the latter, results in an increase of four in the agency.

Reserves.—With an area of fifteen thousand two hundred and fifty-two acres, of the Kitksun division, and twenty-eight thousand nine hundred and sixty-seven acres of the Hoquelget division, respectively, this agency contains a total reserve area of forty-four thousand two hundred and nineteen acres of agricultural, grazing, hay and timber land, inclusive of some for fishing grounds.

I have, &c.,

R. E. LORING,
Indian Agent.

BRITISH COLUMBIA,
COWICHAN AGENCY,
QUAMICHAN, September 20, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my annual report and statistical statement for the year ended June 30, 1901.

Agency.—This agency is situated on the east coast of Vancouver island, and extends from Cape Mudge on the north, to Sooke on the south, including the reserves on the different islands in the Gulf of Georgia.

Area.—The total area of the reserves in this agency is nineteen thousand eight hundred and ninety-three acres, forming a portion of the territory occupied by the Cowichan nation, whose language and influence formerly extended to the bays and sounds on the American side of the gulf and up the Fraser river as far as Yale, which reserves are occupied by the following bands :—

SOOKE BAND.

Reserve.—The reserve of this band is situated on the straits of San Juan de Fuca, about twenty-five miles southwest of the city of Victoria, the area of which is one hundred and sixty-six acres.

Vital Statistics.—The population is twenty-three, consisting of six men, seven women and ten children. During the year one died, one moved to the West Coast ; there were no births.

Health and Sanitary Precautions.—The Indians all enjoy good health, and keep their premises clean and tidy. They were all vaccinated during the year.

Resources and Occupations.—The Indians are chiefly engaged in agriculture and fishing. During the summer they go to the Fraser river for the salmon fishing, and in the fall to the hop-fields in the State of Washington.

Buildings, Stock and Farm Implements.—The Indians have all good implements and stock. Their buildings, including houses, barns and stables, are in good repair. Their stock is well cared for.

Religion.—These Indians are all Roman Catholics.

Education.—There are no schools on the reserve, on account of the small number of children.

Characteristics and Progress.—These Indians are industrious and law-abiding, devoting more attention to the improvement of their land than formerly.

Temperance and Morality.—These Indians are all temperate and moral.

General Remarks.—This band is recovering from the effects of the loss of the schooner *Earle*, by which nearly all the male members of the band were drowned several years ago.

CHEERNO BAND, (BEECHER BAY).

Reserve.—The reserve is situated on the straits of San Juan de Fuca, about fifteen miles southwest of Victoria, and contains an area of seven hundred and seventy-nine acres. As most of the land on this reserve is rocky, very little of it is fit for cultivation.

Vital Statistics.—The total population is fifty-two ; being made up of fourteen men, twenty-two women and sixteen children. During the year there has been one death and two births.

Health and Sanitary Precautions.—The health of the band has been good. The dwellings are kept fairly clean. During the past year the Indians have all been vaccinated.

Resources and Occupations.—These Indians do a little farming, and fishing for the Victoria market. A few go over to the hop-fields in the State of Washington.

Buildings, Stock and Farm Implements.—Dwellings are fairly good. They have a few cattle and horses of medium quality. They own few farming implements, which are, however, of good quality.

Education.—There is no school on this reserve. A few of the children receive rudimentary education from the white settlers living near the reserve.

Religion.—These Indians are principally Roman Catholics ; the others pagans and Shakers.

Characteristics and Progress.—These Indians are fairly industrious and law-abiding, with a tendency to progress.

Temperance and Morality.—Very few of these Indians are addicted to intemperance. They are hardly what is termed good moral Indians.

Songhees Band.

This band comprises the following sub-families :—Esquimalt and Discovery island Indians, as well as the Songhees Indians.

Reserves.—These reserves are situated on Victoria harbour, Esquimalt harbour, and islands in the straits of San Juan de Fuca, the total area of which is three hundred and six acres. Very little of the land is fit for agricultural purposes.

Vital Statistics.—The total population numbers one hundred and sixty-three, consisting of forty men, forty-nine women and seventy-four children. During the year there have been seven births and three deaths.

Health and Sanitary Precautions.—The health of these Indians is fairly good. Living near the city of Victoria their occupied houses are kept in good condition, and are neat.

Resources and Occupations.—Fishing and working for white men in the city of Victoria form their chief means of livelihood.

Buildings, Stock and Farm Implements.—Little, if any, stock is kept by these Indians. Their dwellings and outhouses are in a fairly good condition.

Education.—There is a school on this reserve, which is fairly well attended.

Religion.—They are all either Roman Catholics or Methodists.

Characteristics and Progress.—These Indians are fairly industrious and law-abiding, and show a desire to improve their condition.

Temperance and Morality.—These Indians are fairly temperate and moral, but being situated near the city of Victoria, unfortunately a few are addicted to intemperate habits.

Bands in Saanich District.

Reserves.—The following bands occupy reserves in Saanich district, viz.: the Malakut, Tsekum, Pauquechin, Tsartilp and Tsawout, the total area of the said reserves being three thousand three hundred and eighteen acres.

Vital Statistics.—The total population numbers two hundred and sixty-three, consisting of sixty-nine men, ninety women, one hundred and four children. During the year there have been five births and five deaths ; no change in population.



Modern Indian House, Ayansh, Nass River, B.C.

Resources and Occupations.—The chief occupations of these Indians are general farming, fishing and hop-picking, also working among the adjoining white settlers.

Buildings, Stock and Farm Implements.—Some of these Indians have good, comfortable dwellings, fairly well furnished, and their outbuildings are fairly good.

Their stock are of improved breeds and fairly well cared for.

Their implements, of which they have a good supply, are in good condition.

Education.—There are two schools provided for these Indians, one situated on the Tsawout reserve, the other at Tsartilp. They take a lively interest in education.

Religion.—These Indians are all Roman Catholics, and attend church very regularly.

Characteristics and Progress.—The majority of these Indians are industrious and law-abiding ; unfortunately a few of them get into trouble through violation of the law.

Temperance and Morality.—A few cases of drunkenness occur when the Indians get into the city of Victoria, where they are exposed to temptation by Chinese whisky-pedlars. As a whole they are well behaved.

Bands in Cowichan District.

Reserve.—The following bands occupy reserves in Cowichan valley, which is situated on the east coast of Vancouver island, about forty miles north of the city of Victoria, viz.: Kilpaulus, Comeakin, Clemclemaluts, Khenipsin, Kokasilah, Quamichan and Somenos. The total area of the reserves of said bands is six thousand and eighty-eight acres.

Vital Statistics.—The seven bands have a combined population of six hundred and ninety-nine, consisting of two hundred and thirteen men, two hundred and nineteen women, and two hundred and sixty-seven children. During the year there have been thirteen births, nine deaths; increase for the year, four.

Health and Sanitary Precautions.—The health of these Indians has been tolerably good ; no contagious diseases prevailed during the year, the principal maladies being consumption, scrofula and rheumatism. Owing to the Cowichan and Kokasilah rivers flowing through the reserves, there is always a plentiful supply of clear fresh water, which conduces in a great measure to good sanitation.

Resources and Occupations.—Farming forms the chief occupation, although during the summer and autumn the Indians derive considerable cash from the fisheries on the Fraser river and from the hop-fields in the State of Washington. They also earn considerable money from the white farmers adjoining their reserves.

Buildings, Stock and Farm Implements.—There is a decided improvement in the character of the buildings. A number of the Indians have built private dwelling-houses on their locations, instead of living in the large rancherie houses at the villages, as they used to do formerly. The interior of their houses is well furnished ; several of the Indians own sewing-machines, which the women use to make their own garments.

Some of their stock is of a very superior order ; they are replacing their small ponies with heavy draught horses. There are a number of mowers, reapers, binders and steam-power as well as horse-power threshing-machines owned by the Indians on this reserve, with which they earn considerable sums of money harvesting and threshing the crops of the white farmers.

Education.—These Indians are provided with two schools. One situated in the Somenos village, the other between the Clemclemaluts and Quamichan villages. Both schools are doing good work. The older children attend the Kuper Island industrial school.

Religion.—The majority of these Indians are Roman Catholics ; a few are adherents of the Methodist Church and some are pagans.

Characteristics and Progress.—The Indians in this district are industrious and law-abiding, seldom violating it, and are as a whole very progressive people.

Temperance and Morality.—Taking them as a whole, they are fairly temperate ; a few unfortunately are very fond of liquor. They are very moral and compare favourably with the best Indians on the Pacific coast.

Hellelt Band.

Reserves.—One reserve is situated on the south bank of the Chemainus river, about a mile and a half from its mouth, and another on an island at the mouth of the same river. The two reserves contain a combined area of four hundred and twenty-seven acres.

Vital Statistics.—The population is twenty-five, consisting of eight men, ten women and seven children. No births and no deaths have occurred during the year.

Health and Sanitary Precautions.—These Indians have been very healthy ; no sickness of a contagious nature has prevailed. They all live during the summer months in their private houses.

Resources and Occupations.—The Indians of this band engage chiefly in farming and fishing, and some cash is earned by working among the white farmers, taking contracts clearing land.

Buildings, Stock and Farming Implements.—These Indians have good neat buildings, a few barns or stables. Their stock is not of very good quality, but well taken care of ; so are their farming implements.

Education.—There is no school on this reserve. As soon as the children are old enough, they attend the Kuper Island industrial school.

Religion.—These Indians are either Roman Catholics or semi-pagans.

Characteristics and Progress.—They are industrious, and seldom get into trouble.

Temperance and Morality.—They are a temperate and moral band. A few occasionally indulge in liquor.

The Siccameen and Kulleets Band.

Reserve.—The main reserve is situated between Oyster harbour and Chemainus bay. One reserve is on the western shore of Oyster harbour, a fishing station on the left bank of Chemainus river near its mouth, the total area of which is three thousand and eighty-four acres. There are no lines dividing the lands of the two bands.

Vital Statistics.—The population is one hundred and two, made up of thirty men, thirty-two women and forty children. There have been no births nor deaths during the year.

Health and Sanitary Precautions.—Like the other reserves, there is a good supply of clear spring water located on the beach. There has been very little sickness during the year.

Resources and Occupations.—Very little farming is done by these Indians. The principal occupations are fishing and boat-building. Quite a number find employment in the new town of Ladysmith.

Buildings, Stock and Farming Implements.—Very little stock is kept, but it is well cared for. The houses are in fair condition, principally the larger rancherie houses.

Education.—There is no school on this reserve. Children of school age go to the industrial school on Kuper island.

Religion.—These Indians are all Roman Catholics.

Characteristics and Progress.—These Indians are industrious and law-abiding. Some of them are above the average in intelligence.

Temperance and Morality.—These Indians are temperate and moral, very seldom getting into trouble.

Lyacksun Band.

Reserve.—This reserve is situated on Valdez island, and consists of three reserves, which have a total area of one thousand eight hundred and forty acres.

Vital Statistics.—The population is eighty-eight, consisting of twenty-one men, twenty women and forty-seven children. During the year there have been three births and one death ; increase two.

Health and Sanitary Precautions.—The health of these Indians is very good, due in a great measure to their living on the salt water.

Resources and Occupations.—This reserve is nearly all rock and heavy timber. Little, if any, farming is done ; fishing and boat-building form the chief occupations.

Buildings, Stock and Farming Implements.—Very little stock is kept. The buildings are fair.

Education.—There is no school on the reserve. Children attend the Kuper Island industrial school.

Religion.—All these Indians are either Roman Catholics or pagans.

Characteristics and Progress.—These Indians are industrious and law-abiding.

Temperance and Morality.—Not being near a town, where they would be exposed to temptation, they are temperate and moral.

Penelakut Band.

Reserve.—This band includes the Llmalche and Tsussie bands. Their reserve is situated on Kuper island and Tent island, and the northwest extremity of Galiano island, and a small reserve at the mouth of the Chemainus river, forming a total area of two thousand three hundred and thirty-two acres.

Vital Statistics.—The population is two hundred and twenty-four, consisting of sixty-eight men, sixty-nine women and eighty-seven children. During the year there have been seven births and one death ; increase, six.

Health and Sanitary Precautions.—The general health of these Indians is good. The sanitary conditions are excellent.

Resources and Occupations.—Fishing and boat-building form the chief occupations. Little, if any, farming is done.

Buildings, Stock and Farm Implements.—The buildings are in fairly good condition. Little, if any, stock is kept. There are very few farm implements.

Education.—The Kuper Island industrial school is situated on this reserve.

Religion.—The Indians on this reserve are all Roman Catholics.

Characteristics and Progress.—There is evidence of a steady and permanent improvement in the condition of these Indians, due in great measure to the influence of the industrial school.

Temperance and Morality.—These Indians are tolerably temperate and moral.

Nanaimo Band.

Reserve.—This reserve consists of a reserve on the Nanaimo harbour and one on the Nanaimo river, with a small fishing station on the southern shore of Gabriola island, forming a total area of six hundred and thirty-seven acres.

Vital Statistics.—The population is one hundred and sixty-six, consisting of thirty men, thirty-nine women and ninety-seven children. During the year there have been five births and four deaths ; increase, one.

Health and Sanitary Precautions.—The health of the band is very good. Sanitary conditions are fair, no epidemic occurring during the year.

Resources and Occupations.—These Indians farm, work in the coal mines and trim coal in the ships, at which they earn good wages.

Buildings, Stock and Farm Implements.—Some of the Indians have good, well furnished dwelling-houses. Some even have organs in their houses.

Their stock are fairly good.

Their implements are fair, but not very well cared for.

Education.—They are supplied with a school, and take an active interest in educational matters.

Religion.—These Indians are all Methodists.

Characteristics and Progress.—They are industrious and law-abiding, and show a disposition to improve their condition.

Temperance and Morality.—Considering their proximity to the town of Nanaimo, their habits are fairly temperate and moral.

Snonowas Band (Nanoose).

Reserve.—This reserve is situated on the southern shore of Nanoose harbour, and has a total area of two hundred and nine acres.

Vital Statistics.—The population is thirteen, being four men, seven women and two children. No births nor deaths have occurred during the year.

Resources and Occupations.—The principal employment of these Indians is fishing and the manufacture of dog-fish oil.

Health and Sanitary Precautions.—They are fairly healthy. Sanitary condition is good ; their places are tolerably clean.

Education.—There is no school on the reserve.

Religion.—They are either Methodists or pagans.

Characteristics.—They are industrious.

Temperance and Morality.—They are not very temperate, being rather addicted to the use of intoxicating liquors.

Qualicum Band.

Reserve.—This reserve is situated at the mouth of the Qualicum river. It has an area of one hundred and ninety-seven acres.

Vital Statistics.—The population is thirteen, consisting of four men, four women and five children. There were no births nor deaths during the year.

Health and Sanitary Precautions.—These Indians are fairly healthy. The sanitary condition is good.

Resources and Occupations.—They do a little farming, fish and act as guides for hunting and prospecting parties.

Buildings, Stock and Implements.—Their buildings are fair. Stock not bad. The implements are well cared for.

Education.—There is no school on the reserve.

Religion.—All these Indians are Methodists.

Characteristics and Progress.—There has not been much improvement made during the past year.

Temperance and Morality.—These Indians are temperate and moral.

Comox Band.

Reserve.—This reserve is situated on the northern shore of Comox harbour and on the left bank of the Puntledge river at its confluence with the Tsolum river. In connection with the reserve is a graveyard on Goose Spit, Comox harbour. The area of the reserve is three hundred and seventy-eight acres.

Vital Statistics.—The population is sixty-one ; twenty-two men, twenty-two women and seventeen children. During the year there have been two births and one death.

Health and Sanitary Precautions.—The health of the band has been fairly good ; no diseases nor epidemic prevailed.

Resources and Occupations.—The chief occupations are farming, fishing and hunting.

Religion.—Sixty of these Indians are Presbyterians, and one is a Roman Catholic.

Education.—The school on this reserve is closed on account of the indifference of the parents.

Characteristics and Progress.—These Indians are industrious and law-abiding, but not very ambitious to improve their condition ; not much progress has been made during the year.

Buildings, Stock and Implements.—They have a few buildings in fair condition. Their stock is of medium quality. There are not many farm implements.

Temperance and Morality.—These Indians are not much addicted to drink. Their morality is on a par with that of Indians elsewhere.

Galiano Island Band.

Reserve.—This reserve is located on the northwest extremity of Galiano island, and is included in the area of the reserve of the Penelakut band.

Vital Statistics.—The population is thirty-one, consisting of eight men, eight women and fifteen children. No births nor deaths occurred during the year.

Health and Sanitary Condition.—The health of these Indians is good. Sanitary conditions are fair.

Resources and Occupations.—Fishing and boat-building are the chief occupations. There is no farming, though a little gardening.

Buildings and Stock.—There are many buildings on this reserve. There is no stock.

Education.—The children attend the Kuper Island industrial school.

Religion.—All the Indians of this band are Roman Catholics.

Characteristics and Progress.—These Indians are industrious and law-abiding.

Temperance and Morality.—They are temperate and moral.

Mayne Island Band.

Reserve.—This reserve is situated on the northwest extremity of Mayne island. The area of the reserve is included in that of the bands in the Saanich district.

Vital Statistics.—The population is twenty-seven, consisting of six men, six women and fifteen children. No births nor deaths occurred during the year.

Health and Sanitary Condition.—The health and sanitary condition of the Indians on this reserve are good.

Resources and Occupations.—Fishing for the Victoria and Vancouver markets is their only occupation.

Buildings, Stock and Implements.—This being only a fishing station, there are only a few cedar slab shanties on the reserve. There are no stock and implements for the same reason.

Education.—There is no school on this reserve.

Religion.—All the Indians of this band are Roman Catholics.

Characteristics and Progress.—These Indians are industrious and make a good deal of money by fishing.

Temperance and Morality.—They are temperate and moral.

Cowichan Lake Band.

This reserve is situated on the northern shore of Cowichan lake, near its outlet. It has a total area of one hundred and thirty acres. There is at present only one man and one woman occupying this reserve and that only during the summer months. They spend the winter among their relations on the west coast of the island. There have been no deaths nor births during the year. In religion, they are Methodists.

General Remarks.

The Indians throughout the agency are on the whole industrious and are becoming more self-reliant, showing a desire to settle small disputes among themselves by the advice of the local Indian councils.

In a large measure the success of the Indians is due to the various missionaries working among them, also to the principal of the industrial school on Kuper island and the teachers of the several day schools established throughout the agency, who teach the Indians habits of industry, order and cleanliness, and also, how to think and act for themselves.

I have, &c.,

W. R. ROBERTSON,
Indian Agent.

British Columbia,
Fraser River Agency.
New Westminster, August 26, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to forward my annual report, together with statistical statement, for the year ended June 30, 1901.

Tribe or Nation.—All the Indians in this agency belong to branches of the Salish nation.

Bands in the Chilliwack District.

Reserves.—The following bands occupy reserves in close proximity to each other in the Chilliwack district, forming a total area of three thousand six hundred and forty-one acres, viz. :—Aitchelitz, Kwawkwawapilt, Squiahla, Skwah, Skulkayu, Skway, Tsoowahlie, Tzeachten and Yukkwekwioose.

Vital Statistics.—The nine bands named have a combined population of three hundred and fifteen, an increase of nineteen since last census. During the year there

were eighteen births, eleven deaths and twenty-eight migrations. The migrations were chiefly occasioned through intermarriage with Indians of other bands ; there were no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good, no sickness of a contagious nature having occurred. Their villages are kept clean and in a sanitary condition, and most of the Indians have been vaccinated from time to time.

Occupations.—The Indians of these reserves engage chiefly in agriculture and fishing pursuits. A little is also earned by them working for their white neighbours, and at hop-picking.

Buildings, Stock and Farming Implements.—Their buildings are nearly all frame, and are kept clean and in good repair.

Their stock is of the variety usually found on the farms of their white neighbours, a continued improvement from year to year being noticeable in their horses, the Indian ponies being replaced or crossed with good horses.

Most families have their own farming implements.

Education.—A lively interest is taken by these Indians in educational matters, the Roman Catholic Indians sending their children to the school at St. Mary's mission, and those of the Methodist religion to the Coqualeetza institute, both of which schools are doing an excellent work for these Indians.

Religion.—These Indians follow respectively the Roman Catholic, the Church of England and the Methodist persuasions, and are attentive to religious matters. During the early part of June last, upwards of two thousand Indians assembled on Skwah reserve from different parts of the province to attend the ceremony of opening a new church on the reserve by His Lordship Bishop Dontenwill, assisted by many priests. On the last day of the gathering (June 8) the Indians gave a tableau of the Passion Play in the open air, which was exceedingly well rendered, and was attended by a large number of white people, some of whom came long distances.

Characteristics and Progress.—These Indians are, on the whole, fairly industrious and law-abiding, but lack perseverance.

Temperance and Morality.—They are, as a general rule, moral, but unfortunately many of them are fond of liquor.

Bands on Burrard Inlet, Howe Sound and Squamish River.

These bands, known as the Squamish Indians, and occupying reserves containing a total area of six thousand seven hundred and eighty-six acres, are as follows :—Burrard Inlet No. 3, False Creek, Mission Burrard Inlet, Kapilano, Skawamish, Howe Sound and Seymour Creek.

Vital Statistics.—The combined population of these six bands is three hundred and seventy-four, an increase of eleven during the year. There were fourteen births, twelve deaths and twelve migrations during the year ; migrations chiefly occasioned by intermarriage with other Indians.

Health and Sanitary Precautions.—The health of these Indians has been good. Their villages are kept clean and in a sanitary condition, and all of them have been vaccinated from time to time.

Occupations.—The chief occupations of these Indians are fishing, hunting, logging and loading vessels with lumber at the saw-mills. A little gardening and farming is also done by them.

Buildings, Stock and Farming Implements.—The Indians residing on these reserves have fairly good dwelling-houses and outhouses.

Their cattle and horses are well cared for, and are of good breed.

Their implements also are well taken care of.

Education.—A boarding school was opened adjoining the Mission reserve about two years ago by the Roman Catholic bishop, with four sisters in charge as teachers, also a chaplain. This school fills a long-felt want, and is much appreciated by the Squamish Indians.

Religion.—These Indians are all either Roman Catholics or pagans ; those of them professing the Roman Catholic religion are regular attendants at church, and take great interest in religious matters.

Characteristics and Progress.—These Indians are industrious and law-abiding, and obedient to the advice of their elders.

Temperance and Morality.—These Indians are, on the whole, temperate and moral ; a few only are fond of liquor.

Cheam Band.

Reserve.—The reserve of this band is situated on the south bank of the Fraser river, and about eighty miles from its mouth. It contains an area of fourteen hundred and thirty-three acres.

Vital Statistics.—The population of this band is one hundred and one, a decrease of six since last census. There were three births, four deaths, and five migrations ; migrations caused through intermarriage with Indians of other bands.

Health and Sanitary Precautions.—The health of these Indians has been good, no sickness of a contagious nature having made its appearance among them. Their village is kept clean and in a sanitary condition, and all of the Indians have been vaccinated from time to time.

Occupations.—The Indians of this band engage chiefly in agricultural and fishing pursuits. A little is also earned by them at hop-picking and working for their white neighbours.

Buildings, Stock and Farming Implements.—These Indians all have fairly good dwellings, with good barns and stables.

Their stock are well taken care of, as also are their farming implements.

Education.—A lively interest is manifested in education ; most of the children of school age attend the Indian school at St. Mary's mission.

Religion.—These Indians are all Roman Catholics, with the exception of one, who became a Methodist while a pupil at the Coqualeetza Institute. They have a nice church in their village, which they attend regularly.

Characteristics and Progress.—These Indians are an industrious, law-abiding, good people.

Temperance and Morality.—They are a temperate and moral people, a few only being fond of liquor.

Chehalis and Scowlitz Bands.

Reserves.—The Chehalis and Scowlitz Indians occupy reserves on Harrison river, Scowlitz reserve being at its mouth, and Chehalis about four miles up stream, forming a combined area of three thousand one hundred and forty acres.

Vital Statistics.—The population of these two bands is one hundred and sixty-three. There were nine births and five deaths, making an increase of four since last census.

Health and Sanitary Precautions.—The health of these Indians on the whole has been good ; their villages are kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—Farming, dairying, fishing, and hunting, are the chief occupations of these Indians, as in previous years. James of Scowlitz, and Johnny Leon, Chief

of Chehalis, take the lead in dairying, the former milking nine cows and the latter five cows, during the summer, other members milking one or two cows each.

Buildings, Stock and Farming Implements.—Most of these Indians have comfortable frame dwellings. They have fairly good barns and stables, and take good care of their stock, putting up plenty of hay for them during the winter. They have good farming implements and take good care of them.

Education.—Most of the children of school age of these bands attend the Indian school at St. Mary's mission.

Religion.—These Indians are Roman Catholics, with the exception of five, who belong to the English Church. They are attentive to the instructions received from their pastors.

Characteristics and Progress.—These Indians are making steady progress and are law-abiding, good people.

Temperance and Morality.—They are temperate and moral, a few only being fond of liquor.

Coquitlam Band.

Reserve.—The reserve of this band is situated on the Couqitlam river, and about six miles from New Westminster. It contains an area of two hundred and eight acres.

Vital Statistics.—The population is twenty-six, two births and one death having occurred during the year.

Health and Sanitary Precautions.—The health of these Indians has been good. Their village is kept clean and in a sanitary condition. All the Indians have been vaccinated from time to time.

Occupations.—These Indians engage chiefly in fishing and hunting. Being near New Westminster, they furnish the local market with most of the fresh fish and game required.

Buildings, Stock and Farming Implements.—Most of these Indians have fairly good dwellings. They do not keep much stock, preferring to make a living by fishing and hunting.

Religion.—These Indians are Roman Catholics. They have a nice church on their reserve, where they attend divine service regularly.

Characteristics and Progress.—These Indians are industrious and law-abiding.

Temperance and Morality.—They are on the whole temperate and moral, a few only being fond of liquor.

Douglas, Skookum Chuck, Samahquam and Pemberton Meadows Bands.

Reserves.—These bands occupy reserves situated between the head of Harrison lake, along the Lillooet portage to Pemberton, and contain a combined area of three thousand four hundred and eighty-five acres.

Vital Statistics.—The population of these bands is five hundred and four, being an increase of twenty-three since last census. There were twenty-four births, nineteen deaths and thirteen migrations during the year ; migrations caused by intermarriage with Indians of other bands.

Health and Sanitary Precautions.—The health of these Indians on the whole has been good. Their villages are kept clean and in a sanitary condition, and most of them have been vaccinated from time to time.

Occupations.—Fishing, hunting, packing, acting as guides to prospectors, and agricultural pursuits are the chief occupations of these Indians. Owing to the high

water last year all crops planted at Pemberton Meadows, as well as at other points, were destroyed by the floods.

Buildings, Stock, and Farming Implements.—These Indians have fairly good dwellings, barns and stables, and keep them in good repair. The barns and stables are mostly log buildings. Their horses are mostly Indian ponies. Their cattle, on the other hand, are excellent animals and are well taken care of, a plentiful supply of hay having been cut to feed them during winter. Farming implements are well cared for.

Religion.—These Indians are all Roman Catholics. They have three churches, one at Douglas, one at Skookum Chuck and one at Pemberton Meadows.

Characteristics and Progress.—These Indians are an industrious, law-abiding, simple, good people.

Temperance and Morality.—These Indians are temperate and moral and are stictly honest, very few of them being addicted to the use of liquor.

Ewawoos and Texas Lake Bands.

Reserves.—The reserves of these bands are situated, the former on the south bank of the Fraser river, about two miles east of Hope, and the latter on the north bank of the Fraser river, about seven miles east of Hope. They contain a combined area of eight hundred and ninety-three acres.

Vital Statistics.—The population of these two bands is fifty-nine. There were three births and two deaths during the year ; no other change in the population.

Health and Sanitary Precautions.—The health of these Indians has been good, their villages are kept clean and in a sanitary condition, and the Indians have all been vaccinated from time to time.

Occupations.—The principal occupations of these Indians are fishing, hunting, and agriculture, a little mixed farming being done by each family.

Buildings, Stock and Farming Implements.—Nearly all of these Indians have comfortable dwellings and outhouses and keep them in good order. Their farming implements are well cared for and suitable for their requirements. Their stock also is well cared for and looked after.

Education.—A lively interest in education is taken by these Indians ; most of their children of school age are attending school at St. Mary's mission.

Religion.—These Indians are mostly Roman Catholics. A few belong to the Church of England. They are a simple-minded good people. There is a church at each village where services are held frequently.

Characteristics and Progress.—These Indians are an industrious and law-abiding people, are obliging and kind to their white neighbours.

Temperance and Morality.—They are a temperate, moral, good people.

Hope Band.

Reserve.—These Indians occupy a reserve about one hundred miles from the mouth of the Fraser river on the north and south banks of the river, containing an area of fourteen hundred acres.

Vital Statistics.—This band has a population of eighty-seven. There was one birth and one death during the year ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good ; most of them have been vaccinated from time to time.

Occupations.—These Indians engage chiefly in agriculture and fishing, each family doing more or less mixed farming and fruit-culture, also poultry-raising.

Buildings, Stock and Farming Implements.—These Indians all have comfortable dwellings and fairly good barns and stables. They take good care of their cattle and

horses, putting up a good supply of fodder for them during the winter. They have a good supply of farming implements, including a threshing-machine, of which they take good care.

Education.—The greater number of these Indians have been educated at the Indian school at St. Mary's mission, and all of them are anxious to have their children educated.

Religion.—Most of these Indians are Roman Catholics. They have a nice church built on their reserve, where they attend divine service regularly.

Characteristics and Progress.—These Indians are industrious and law-abiding. They live better and more like their white neighbours than any other band in the district. The chief of the band, Pierre Ayessik, is a man of more than average intelligence, and to him is due the credit in a great measure for the advanced state of the Hope Indians.

Temperance and Morality.—They are a temperate, moral, good people.

Homalko and Klahoose Bands.

Reserves.—The reserves of these bands are situated in the vicinity of Bute inlet and Malaspina straits ; they contain a combined area of four thousand seven hundred and eighty-three acres.

Vital Statistics.—These bands have a population of one hundred and fifty-seven. There were two births, nine deaths, and one migration during the year ; deaths were mostly of children and were the result of measles.

Health and Sanitary Precautions.—With the exception of an epidemic of measles among children, the health of these Indians has been good. Their villages are kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—Fishing, hunting, logging and farming constitute the occupations of these Indians, only a small amount of farming being done.

Buildings, Stock and Farming Implements.—The buildings occupied by these Indians are mostly good frame dwellings, although some of them are not so, and are of the old-time houses. Their stock are never housed, but manage to get along fairly well, as there is very little frost or snow on this part of the coast. They keep no horses, and the only implements they have are those they can use by hand, such as spades, shovels, &c.

Religion.—These Indians are all Roman Catholics ; they have a nice church at Squirrel cove, and one at the mouth of Bute inlet, where they attend divine service regularly.

Characteristics and Progress.—These Indians are a simple-minded, good people, and as a rule provide for all their requirements, very seldom asking for assistance.

Temperance and Morality.—They are temperate and moral, not a half-breed being among either band.

Katsey Band.

Reserve.—The reserve of this band is situated on the north bank of the Fraser river, about ten miles from New Westminster. It contains three hundred and eighty-five acres.

Vital Statistics.—The population of this band is seventy-eight. There were two births and two deaths during the year ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good ; their village is kept clean and in a sanitary condition, and they have all been vaccinated from time to time.

Occupations.—The chief occupations of these Indians are fishing, hunting and farming, each family doing a little mixed farming.

Buildings, Stock and Farming Implements.—These Indians have fairly good dwellings, barns and stables. Their stock are well cared for, as are also their farming implements.

Education.—A number of these Indians send their children to the Indian school at St. Mary's mission, the parents in most cases being anxious to get their children educated.

Religion.—These Indians are all Roman Catholics. They have a small church on their reserve, where divine service is held from time to time, and are attentive to the religious instruction given them by their priest.

Characteristics and Progress.—These Indians are industrious and law-abiding, and are making steady improvement.

Temperance and Morality.—These Indians are a moral people. In past years many of them were of intemperate habits, but I am glad to say they are much improved in this respect.

Langley and Wharnock Bands.

Reserves.—The reserves of these bands are situated, the former on MacMillan island, in the Fraser river, about twenty miles east of New Westminster, and the latter on the north bank of the Fraser river, about twenty-four miles east of New Westminster. They contain a combined area of one thousand four hundred and fifty-two acres.

Vital Statistics.—The population of these two bands is sixty-four, a decrease of four since last census. There were no births and four deaths during the year ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been fairly good, although consumption seems to have a hold on several of them. Their villages are kept clean, and all the Indians have been vaccinated from time to time.

Occupations.—All these Indians do more or less mixed farming, and during the fishing season fish for the canneries.

Buildings, Stock and Farming Implements.—These Indians all have comfortable dwelling-houses, good barns and stables, which are kept clean and in good repair. Their cattle and horses are of good breeding, and are well taken care of, as also are their farming implements.

Education.—Many of these Indians have been educated at St. Mary's mission Indian school, and all of them take an active interest in educational matters.

Religion.—They are all Roman Catholics. They practise their religion faithfully, and are good people. They have a small church on each reserve, where divine service is held regularly.

Characteristics and Progress.—They are industrious and law-abiding.

Temperance and Morality.—These Indians are a temperate, moral people, and are not given to the use of liquor.

Musqueam Band.

Reserve.—The reserve of this band is situated on the north arm of the Fraser river, close to its mouth. It contains an area of four hundred and fifty-two acres.

Vital Statistics.—This band has a population of ninety-six, an increase of four since last census. There were five births and one death during the year ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good. Their village is kept clean and in a sanitary condition, and some of the Indians have been vaccinated from time to time.

Occupations.—These Indians all do more or less mixed farming, and during the fishing season fish for the canneries.

Buildings, Stock and Farming Implements.—They have all comfortable dwellings with fairly good barns and stables. Their horses and cattle are well cared for, as are also their farming implements.

Education.—These Indians are anxious to have their children receive a good education. Some have their children at the Coqualeetza Institute, some at St. Mary's mission and others again at Kuper island school.

Religion.—Eighty-three of these Indians are Roman Catholics, ten are Methodists and three are pagans.

Characteristics and Progress.—These Indians are industrious and law-abiding and are improving from year to year.

Temperance and Morality.—These Indians are on the whole temperate and moral, a few only of them being addicted to the use of liquor.

Matsqui Band.

Reserve.—The reserve of this band is situated on the south bank of the Fraser river, about thirty miles east from New Westminster, and contains an area of one thousand and seventy-two acres.

Vital Statistics.—This band has a population of forty-two, an increase of two since last census. There were four births and three deaths and one migration during the year ; migration occasioned through marriage. No other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good. Their village is kept clean and in a sanitary condition, and all of these Indians have been vaccinated from time to time.

Occupations.—All of these Indians do more or less mixed farming, and during the fishing season fish for the canneries.

Buildings, Stock and Farming Implements.—Most of these Indians have comfortable dwellings with fairly good barns and stables. Their stock are well cared for, as also are their farming implements.

Education.—These Indians take a keen interest in educational matters. Most of the younger members of the band having attended the mission school.

Religion.—They are all Roman Catholics and attend church every Sunday at St. Mary's mission. They are attentive to their religious duties.

Temperance and Morality.—They are temperate and moral, very few of them being addicted to the use of liquor.

Indians at New Westminster.

Reserve.—These Indians have reserves in New Westminster and at Brownsville, comprising an area of about ten acres.

Vital Statistics.—These Indians have a population of sixty-five. During the year there were three deaths ; there were no births and no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good. Their dwellings are kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—They make a living chiefly by fishing and hunting. They supply the local market with a good deal of the fish and game required.

Buildings, Stock and Farming Implements.—These Indians have comfortable dwellings. A few of them own their own residences in the city of New Westminster, on which they pay taxes. Very little farming is done by them, just a few garden patches. They do not keep much stock.

Education.—These Indians take quite an interest in education, and are anxious to have their children educated.

Religion.—They are all Roman Catholics. They have a nice church on the reserve at Brownsville, where divine service is held regularly.

Temperance and Morality.—These Indians are a temperate, moral people ; only a few of them being addicted to the use of liquor.

Nicomen and Skweahm Bands.

Reserves.—These Indians occupy two reserves on the north bank of the Fraser river, about forty-four miles from New Westminster, comprising an area of six hundred and thirty-six acres.

Vital Statistics.—The population of these two bands is forty-six. There were two births and four deaths ; no other change in the population.

Health and Sanitary Precautions.—The health of these Indians has been good. Their villages are kept clean and in a sanitary condition, and all of the Indians have been vaccinated from time to time.

Occupations.—Farming and fishing are the chief occupation of these Indians. Nearly all of them do more or less mixed farming, and during the fishing season fish for the canneries.

Buildings, Stock and Farming Implements.—These Indians have fairly good dwellings, barns and stables. Their stock are well cared for, as also are their farming implements.

Education.—These Indians do not trouble much about education and very few of them can either read or write.

Religion.—They are all Roman Catholics, but are not much troubled over religion. They have a small church at Skweahm which is seldom used.

Characteristics and Progress.—They are a simple-minded people, follow their old customs a good deal, but are improving gradually.

Temperance and Morality.—These Indians are, on the whole, moral, but many of them are addicted to the use of liquor.

Semiahmoo Band.

Reserve.—The reserve of this band is situated on the south bank of the Fraser river, about seventy-four miles east of New Westminster, and contains an area of six hundred and twenty-nine acres.

Vital Statistics.—This band has a population of fifty-seven. There was one birth and two deaths during the year ; no other change in the population.

Health and Sanitary Precautions.—The health of these Indians has been good. Their village is kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Buildings, and Stock.—These Indians all have fairly good dwellings, barns and stables, which are kept in good repair. Their cattle and horses are well cared for, and are of similar quality to those found among their white neighbours.

Occupations.—Farming and fishing are the chief occupations of these Indians, nearly all of them doing more or less mixed farming, and during the fishing season they fish for the canneries.

Education.—These Indians take an active interest in education. Most of the children of school age attend the school at St. Mary's mission.

Religion.—These Indians are much attached to their religion. They have two small churches on their reserve, one belonging to the Indians who are members of the Church of England, and the other belonging to those of the Roman Catholic Church.

Characteristics and Progress.—They are an industrious, law-abiding people, and are easy to get along with.

Temperance and Morality.—They are a temperate, moral people.

Popcum and Squatits Bands.

Reserves.—The reserves of these two bands are situated on the south bank of the Fraser river, about sixty-five miles east of New Westminster, and contain a combined area of five thousand three hundred and twenty-six acres.

Vital Statistics.—The population of these two bands is fifty-six. There was one birth and four deaths; no other changes in the population during the year.

Health and Sanitary Precautions.—The health of these Indians has been good. Their villages are kept clean and in a sanitary condition, and most of the Indians have been vaccinated from time to time.

Occupations.—Fishing and farming are the chief occupation of these Indians, each family doing a little mixed farming, and during the fishing season they fish for the canneries.

Buildings, Stock and Farming Implements.—Most of these Indians have fairly good dwellings and outhouses, which are kept in fairly good repair. Their horses and cattle are well cared for, as also are their farm implements.

Education.—These Indians take a lively interest in educational matters, most of the parents being anxious to send their children to school. A few, however, take no interest in education.

Religion.—Twenty-six of these Indians belong to the English Church, ten to the Methodist Church and twenty are Roman Catholics. The members of each denomination have their own church, and are attentive to their religious duties.

Characteristics and Progress.—They are a simple-minded, easy-going people, and are easily managed.

Temperance and Morality.—They are, on the whole, temperate and moral, a few only being fond of liquor.

Semiahmoo Band.

Reserve.—The reserve of this band borders on the international boundary line, and fronts on Semiahmoo bay. It contains an area of three hundred and ninety-two acres.

Vital Statistics.—The population of this band is thirty-two. There was one birth and one death ; no other changes in the population during the year.

Health and Sanitary Precautions.—The health of these Indians during the year has been good. Their village is kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—Their chief occupation is fishing, a little mixed farming or gardening being done by each family.

Buildings, Stock and Farming Implements.—Most of these Indians have comfortable dwellings and outhouses, which are kept in good repair. Their cattle and horses are similar to those found with their white neighbours, and are well taken care of, as also are their farming implements.

Education.—Only a few of these Indians can either read or write, and owing to the inadequacy of school accommodation provided, there is no room for any of these children at the mission school.

Religion.—They are all Roman Catholics ; they have a small church on their reserve, where divine service is held regulaly.

Characteristics and Progress.—They are an easy-going, simple people, and easy to get along with.

Temperance and Morality.—They are, on the whole, temperate and moral ; but owing to their close proximity to the American boundary, they can easily procure liquor ; but, on the whole, there is little to find fault with.

Sechelt Band.

Reserve.—The reserve of this band is situated on the Sechelt peninsula, Malaspina straits, and contains an area of eight hundred acres.

Vital Statistics.—The population of this band is two hundred and thirty-four. There were eight births, eight deaths, and eight Indians migrated from Sliammon during the year ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good. Their village is kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—Fishing, hunting, and hand-logging constitute the principal occupations of these Indians, a little gardening being done by each family.

Buildings, Stock and Farming Implements.—These Indians have all comfortable dwellings, which are kept in good repair. Their stock are allowed to run at large during summer and winter, but on the whole do fairly well.

Religion.—They are all Roman Catholics. They have a beautiful church at their village, where divine service is held regularly.

Characteristics and Progress.—They are a simple, kind people, are easy to get along with, and are strictly honest.

Temperance and Morality.—They are a temperate, moral people ; drunkenness is practically unknown among them, and to their credit there is not a half-breed among the band.

Sumass Band.

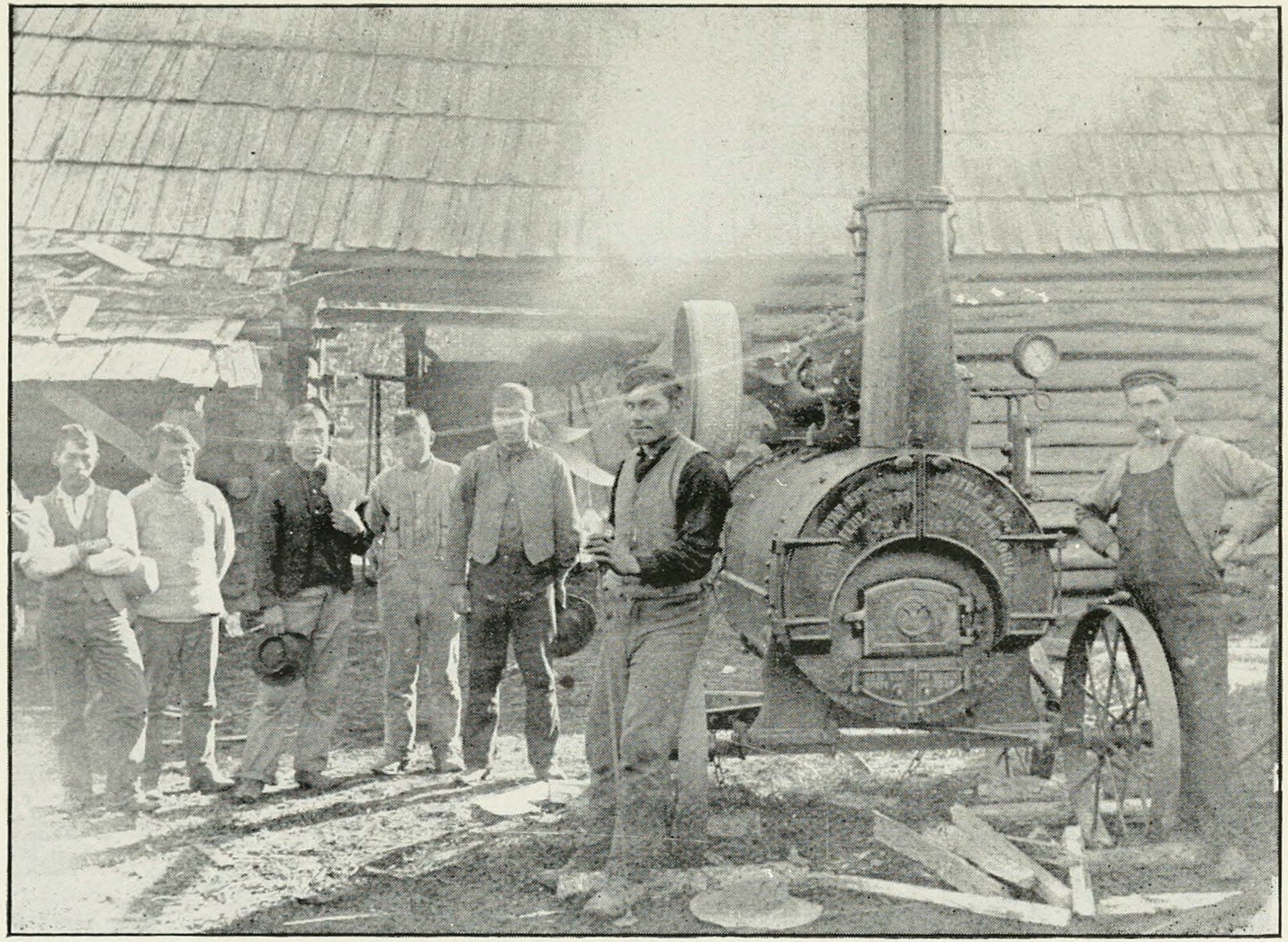
Reserves.—The reserves of this band are situated at Miller's Landing, on the south bank of Fraser river, at Sumass Bar, on the north bank of the Fraser river, and at Upper Sumass, on Sumass lake ; and contain an area of thirteen hundred and seventy acres.

Vital Statistics.—This band has a population of fifty. There were no births and no deaths during the year. There were eight migrations, one family, consisting of father, mother and six children, having moved to Skwah reserve.

Health and Sanitary Precautions.—The health of these Indians has been good. Their villages are kept clean, and in a sanitary condition, and most of the Indians have been vaccinated from time to time.

Occupations.—Mixed farming, fishing and hunting are the chief occupations of these Indians.

Buildings, Stock and Farming Implements.—They have all fairly good dwellings, barns and stables. Their stock are of good grade, and are well taken care of, as also are their farming implements.



THRESHING MACHINE OWNED AND WORKED BY INDIANS, SOMENOS RESERVE, COWICHAN, B.C.

Education.—Only a few of these Indians have ever attended school, and they do not take much interest in education.

Religion.—Twenty-eight are Methodists and twenty-two are Roman Catholics. They are very enthusiastic in religious matters, each denomination having its own church.

Characteristics and Progress.—These Indians are a simple, easy-going people, rather indolent and giving little trouble.

Temperance and Morality.—They are on the whole temperate and moral, only a few of them being fond of liquor.

Sliammon Band.

Reserve.—The reserve of this band is situated on Malaspina straits, and contains an area of four thousand seven hundred and twelve acres.

Vital Statistics.—This band has a population of one hundred and two. There were two births and eight deaths during the year. In previous years a number of Indians belonging to Sechelt, Klahoose, and Homalko, and who were intermarried with Sliammon Indians, had been enumerated by mistake twice. This is now rectified, the correct number being one hundred and two.

Health and Sanitary Precautions.—The health of these Indians on the whole has been good, and excepting an epidemic of measles, which caused the death of eight children, no sickness of a serious nature occurred among them. Their village is kept clean and in a sanitary condition, and all of the Indians have been vaccinated.

Occupations.—The chief occupations of these Indians are fishing, hunting and hand-logging, only a little gardening being done by each family.

Buildings, Stock and Farming Implements.—These Indians are improving their dwellings from year to year. Their stock run at large during summer and winter, and do fairly well.

Religion.—They are all Roman Catholics and are much attached to their religion. They have erected a beautiful church on their reserve during the past year.

Characteristics and Progress.—These Indians are an easy-going, simple-minded people, obedient to authority and scrupulously honest.

Temperance and Morality.—They are temperate and moral. To their credit there is not a half-breed in the band.

Skwawahlook's Band.

Reserve.—The reserve of this band is situated on the north bank of the Fraser river, between Ruby creek and Hope. It contains an area of one hundred and ninety-six acres.

Vital Statistics.—This band has a population of twenty-three. There was one birth and one death during the year ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good, their villages kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—Mixed farming, fishing and hunting constitute the chief occupations of this band.

Buildings, Stock and Farming Implements.—These Indians have fairly good dwellings, barns and stables. They take good care of their stock during winter, as also of their farming implements.

Religion.—They are all Roman Catholics. They have a small church on their reserve, where service is held regularly. They are attentive to their religious duties.

Characteristics and Progress.—They are a simple-minded, easy-going people, obedient to authority, and live on good terms with their white neighbours.

Temperance and Morality.—These Indians are a temperate, moral people.

Tchewassan Band.

Reserve.—The reserve of this band is situated on the gulf of Georgia, near Point Roberts, and contains an area of six hundred and four acres.

Vital Statistics.—This band has a population of forty-five. There were three births, one death and three migrations during the year ; migrations occasioned through intermarriage with other Indians ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been good, their village kept clean and in a sanitary condition, and all of the Indians have been vaccinated from time to time.

Occupations.—Farming, fishing and hunting are the chief occupations of these Indians.

Buildings, Stock and Farming Implements.—These Indians have fairly good dwellings, barns and stables. They have a good grade of horses and cattle, also good farm implements, which they take good care of.

Education.—Only a few of these Indians have ever received any education, owing to the fact that the school at St. Mary's mission is constantly full. A few have sent their children to Kuper Island industrial school.

Religion.—These Indians are all Roman Catholics. They are not very much given to religious ideas. They have no church on their reserve, and when they come to church they generally go to Kiekiet reserve (Brownsville), which they usually do at Christmas and Easter.

Characteristics and Progress.—They are on the whole a simple, good people. Having enough for their immediate wants, they have little thought for to-morrow.

Temperance and Morality.—These Indians are moral, but I am sorry to say many of them are fond of liquor.

Yale Band.

Reserve.—The reserve of this band is situated on the Fraser river, about one hundred and twelve miles from its mouth, and contains eleven hundred acres.

Vital Statistics.—The population of this band is eighty-three, a decrease of six during the year. There were no births and six deaths ; no other changes in the population.

Health and Sanitary Precautions.—The health of these Indians has been fairly good. Four Indians, who had been suffering from consumption for quite a while, died from the disease within the year. Their villages are kept clean and in a sanitary condition, and all the Indians have been vaccinated from time to time.

Occupations.—Farming, fishing and hunting are the chief occupations of these Indians. A few work as section hands on the Canadian Pacific railway.

Buildings, Stock and Farming Implements.—These Indians have fairly good dwellings, barns and stables. They do not keep many cattle or horses, but what stock they have are well cared for, as also are their farming implements.

Education.—These Indians take a good deal of interest in the education of their children, and are anxious to see them on a par with their white neighbours.

Religion.—Sixty-three of these Indians are Roman Catholics, and twenty are members of the Church of England. They are very attentive to their religious duties, each denomination having its own church in the village, where divine service is held from time to time.

Characteristics and Progress.—These Indians are a simple-minded, good people, easy to get along with, and live in harmony with their white neighbours.

Temperance and Morality.—They are a temperate and moral people.

General Remarks.

The Indians throughout this agency are slowly but steadily improving. Those of them who have been educated and who have taken up house on their own account show a marked improvement in their homes, as compared with those of their less fortunate neighbours who have not received any school training. The four schools in this agency, viz.: All Hallows, Coqualeetza Institute, St. Mary's Mission and Squamish Mission, have been well attended; the pupils attending them have made marked progress, and show the good training received. To the principals in charge of these schools, as well as to their assistants, too much praise cannot be given for the care and attention bestowed on the pupils under their charge.

I have, &c.,

FRANK DEVLIN,
Indian Agent.

British Columbia,
Kamloops-Okanagan Agency,
Kamloops, August 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit my annual report, together with statistical statement, on the affairs of this agency for the fiscal year ended June 30, 1901.

Location.—The Kamloops-Okanagan agency is located in, and scattered over, the greater portion of Yale district, immediately north of the international boundary line; the district contains approximately twenty-four thousand square miles. The agency contains an aggregate acreage, according to plans, of three hundred and thirty-three thousand nine hundred and fifty-four acres. Some of the plans of additions made to the reserves in the Upper Similkameen have not yet been completed. This would enlarge the area somewhat.

Means of Conveyance.—The Canadian Pacific railway, with its extension of the Shuswap and Okanagan branch, and a stretch of steamboat navigation of some seventy miles, encircles the agency, somewhat in the form of a horse-shoe, from Spuzzum, on the Fraser river, to Penticton, at the foot of Okanagan lake, a distance of three hundred and forty-two miles. Other portions, extending beyond and lying within this segment, are reached by stage lines, by saddle-horses, and in some of the more inaccessible portions—particularly along the Fraser—on foot.

Tribe or Nation.—The Indians belong to the Shuswap, Thompson River and Similkameen tribes, and speak the languages known as Shuswap, Thompson and Similkameen. Many of the younger ones speak very good English.

Natural Subdivisions.—The agency is divided naturally by the rivers which drain it, into the Fraser, Thompson, Nicola, Similkameen and Okanagan districts.

FRASER DISTRICT.

Reserves.—This district, extending from Spuzzum to Nesikeep, the western boundary of the agency, contains the following reserves, viz. : Spuzzum, Boston Bar, Kanaka Bar, Boothroyd's and Lytton. These reserves are again divided among various bands of Indians.

The same natural features characterize all of the Fraser reserves ; 'bench' lands along the river's banks at various elevations from high-water level to several hundred of feet in height, in places a succession of benches extending to a background of rugged, timbered mountains. These terraces, with their houses, gardens, small orchards and small cultivated fields, form generally a very picturesque landscape. Below Lytton, outside of the small area cultivated, little open ground or natural pasturage exists. From Lytton to Nesikeep, up the Fraser, the natural character of the country becomes more open, with fairly good grazing lands. More irrigation, too, is required to raise crops ; the facilities for irrigation are good, but the amount of tillable land is limited.

Resources and Occupations.—The bands below Lytton grow principally small patches of timothy and clover hay and vegetables, as well as small quantities of fruit, apples, plums and small fruits. The Indians depend more on mining, when the stage of water is suitable, fishing in season, and hunting to some extent. Also, many of them get employment on the railroad, and give good satisfaction as section hands. Above Lytton they farm more extensively, and have more horses and larger herds of cattle. They also follow mining and fishing extensively.

Health and Sanitary Precautions.—The health of these Indians has been good, the death-rate being about three and two-thirds per cent. No epidemic has appeared among them. The villages during winter are kept in fairly good sanitary condition. On the opening of spring the great majority of the Indians abandon their houses and villages and live in tents, either on their little plots of ground or scattered along the river, as their mining operations require. This has a sanitary effect on the older ones, but the children are sometimes exposed to the inclemency of the weather in early spring. Vaccination has been attended to.

Buildings, Stock and Implements.—The majority of their buildings are of hewn logs, very substantially built, and roofed with cedar shingles principally. Around Lytton and Kapatsitsan (North Bend) a good proportion of the houses are frame.

Of stock, the Indians have a number of horses, mostly for riding and packing, and some cattle. They have sufficient farm implements for their limited requirements.

Education.—A few children from some of the bands have attended the industrial school at Kamloops and All Hallow's, Yale. Some of the Spuzzum band have attended the provincial day school in operation near the latter place, and they have made good progress and have been well behaved.

Religion.—All the Indians profess Christianity, and belong either to the Roman Catholic or Anglican denominations. They have good churches and attend service regularly.

Spuzzum Band.

Reserve.—The area of this reserve is four hundred and fifty-seven acres.

Vital Statistics.—The population is one hundred and fifty-nine. During the year there were three births and two deaths.

Progress.—During the year one new house has been built and fencing improved.

Boston Bar Bands.

Reserves.—The reserves of these bands include Tquayum, Kapatsitsan and Skuzzy, embracing a combined area of six hundred and twenty-eight acres.

Vital Statistics.—The population of Tquayum is seventy-three. There have been three births and three deaths during the year. The population of Kapatsitsan is fifty-two. There have been four deaths and three births during the year.

The Skuzzy reserve has become almost deserted and the population, thirty-five, merged in that of Tquayum and Kapatsitsan.

Characteristics and Progress.—These bands are industrious and well-behaved. They work largely for wages, fish, hunt and mine for gold, and do not lay up much for a rainy day. Chief George, Kapatsitsan, has a nice little orchard and garden producing well. Some improvement has been made in their houses, noticeably at Tquayum.

Boothroyd Bands.

The reserves of these bands contain one thousand five hundred and sixty and one-half acres, and are occupied by Nkatsam, Sook and Kamus bands.

Vital Statistics.—The population of Sook-Kamus band is seventy-four. There have been two births during the year and no deaths.

The population of Nkatsam band is eighty-seven. There have been two deaths and five births during the year.

Characteristics and Progress.—These Indians are good workers and exceptionally law-abiding. Drunkenness or violation of law is almost unknown among them, consequently they are better off than many of the Fraser Indians. They make a comfortable living by working on the railway, by mining, fishing, and from the proceeds of their lands and stock. They have built a small church and improved their lands and fences during the year.

Kanaka Bar Bands.

The reserves of these bands contain an area of one thousand and sixty-seven and one-half acres.

Vital Statistics.—The population of Hlukhlukatan is fifty-six. There have been two births and two deaths during the year.

The population of Siska band is thirty-two. There have been no births and no deaths during the year.

Characteristics and Progress.—These Indians are good workers and steady, and are well-behaved. They have little ground which can be improved. They have built one house during the year.

Lytton Reserves and Skappa.

These reserves, thirty-two in number, contain ten thousand five hundred and sixty and a fraction acres. They are occupied by the Klickumcheen, Nkya, Spapium, Nhumeen, Stryne, Snahaim, Skapp, Yeut, Nesikeep and Skappa bands.

Vital Statistics.—The population of Klickumcheen is one hundred and thirty-seven. There have been ten births and eleven deaths during the year.

The population of Spapium band is thirty-four. There have been no births and no deaths during the year.

The population of Nhumeen band is thirty-one. There have been four births and five deaths during the year.

The population of Stryne band is fifty-seven. There has been one birth and one death during the year.

The population of Sanahaim band is forty. There have been three births, one death and two migrations from the band during the year.

The population of Skapp band is twenty-three. There has been one birth and no deaths during the year.

The population of Yeut is forty-four. There have been two births, one death and two migrations into the band during the year.

The population of Nesikeep band is twelve. There has been one death and no births during the year.

The population of the Skappa band is eighteen. There have been no births and no deaths during the year.

Characteristics and Progress.—All of these bands are industrious and law-abiding and succeed for the most part in making a good living. The opportunities for increasing their tillable land are limited, still some progress has been made in this direction. Yeut and Snahaim bands in particular have greatly increased their agricultural products. The fine appearance of the orchards at Yeut and Spapium attract attention. Two houses have been built and fencing improved.

Temperance and Morality.—Few cases of drunkenness occur among the Fraser Indians, and they are generally good-living people.

THOMPSON DISTRICT.

This district extends along the Thompson river from Lytton to Kamloops, and includes, with its tributaries, the Bonaparte river and Deadman's creek, the following reserves : Nicaomin, Cook's Ferry, Oregon Jack creek, Ashcroft, Bonaparte and Deadman's creek. At Kamloops the Thompson is divided into the north and south branches, the Kamloops reserve being situated at the confluence, and being bounded on the west and south by these branches respectively. The north Thompson reserve is fifty miles up the north branch, and Neskainlith, Adam's lake and Kuaut on the south branch and Shuswap lake, the source of this branch.

Nicaomin and Shhahanih Bands.

Reserves.—The reserves of these bands, eighteen in number, are situated along the banks of the Thompson, between Lytton and Cook's Ferry, on Nicaomin creek, and on the Lower Nicola river.

They contain twelve thousand six hundred and twenty-six and a half acres.

They consist of small, irregular and detached bench lands, lying along the rivers, at different elevations, and mountain grazing lands.

Vital Statistics.—The population of Nicaomin band is forty-nine. There were two births and four deaths during the year.

The population of the Shhahanih band is eigty-one. There have been four births and two deaths during the year.

Health and Sanitary Precautions.—The health of these bands generally has been good. No epidemic has appeared among them. Sanitary conditions are fairly good.

Resources and Occupations.—The chief occupations of these Indians are farming and stock-raising, mining, fishing and hunting, and working as labourers on the railroad for the farmers in the Nicola country. Those settled on the Nicola do some freighting and packing.

Buildings, Stock and Implements.—Their buildings are mostly of logs, well put together and comfortable.

Their stock consists of horses and cattle, chiefly the former, which they are improving ; and a few pigs.

Of farm implements, they have ploughs, harrows, wagons and harness sufficient.

Religion.—All but two of these Indians belong to the Anglican Church. Two belong to the Roman Catholic Church. They have no church, and consequently seldom have service.

Characteristics and Progress.—These Indians are industrious and law-abiding, and they are making some progress in farming and in improving their stock. A much larger crop was grown last season than formerly.

Cook's Ferry Bands.

Reserves.—The reserves of these bands, fifteen in number, are located along both banks of the Thompson, and on the higher plateaus and in the valleys adjacent thereto, from Cook's Ferry to Ashcroft. The reserves in the Oregon Jack group are also included, making an area of eleven thousand eight hundred and seventy-six acres.

The country consists of bench lands, with open or sparsely timbered bunch grass hills and mountain meadows. Around Cook's Ferry the benches are dry and unproductive. Further up the river, in the vicinity of Spatsim, they are better adapted for cultivation. The bands occupying these reserves are Nkumcheen and Spatsim, the latter including the small bands known as Paskha and Nepa.

Vital Statistics.—The population of the Nkumcheen band is eighty-one. There were two births and one death during the year.

The population of Spatsim band is one hundred and thirty-five. There have been eight deaths and six births during the year.

Resources and Occupations.—These Indians engage in farming, stock-raising, mining, fishing and hunting, and various occupations as cowboys and labourers.

Buildings, Stock and Implements.—Their buildings are mostly of logs and covered with earth, excepting a few at Cook's Ferry. They are inferior to those on many reserves, but building material is hard to procure.

These Indians raise quite a number of horses of fair quality, cattle and other domestic animals.

They are well supplied with ploughs, harness and other farm machinery.

Characteristics and Progress.—These Indians are industrious and well-conducted. The Spatsim band is making progress in farming and improving its stock.

Religion.—All of these Indians belong to the Anglican Church. They have two church buildings.

Ashcroft or Stlahl Band.

Reserves.—The reserves of this band, four in number, are situated on the right bank of the Thompson, mostly on an elevated plateau several hundred feet above the river. They contain five thousand five hundred and seventy-seven acres. The country consists of open benches and rolling bunch-grass hills. The benches are suitable for cultivation and with water for irrigation would produce well. The hills formerly afforded good grazing, but the bunch grass has been much eaten off.

Vital Statistics.—The population is sixty. There have been no births and no deaths during the year.

Health and Sanitary Precautions.—The general health of these Indians has been good. No epidemic has been among them. Their houses are very well kept during the winter, and during the summer they are for the most part abandoned.

Resources and Occupations.—These Indians engage in farming to some extent, which is curtailed from a lack of water for irrigation, fishing and hunting ; as farm hands and cowboys, freighting on the Cariboo road, and cutting and hauling wood to Ashcroft town.

Buildings, Stock and Implements.—Their buildings are mostly of logs ; older ones are inferior and covered with earth ; the modern ones are much better and roofed with shingles, more commodious and better ventilated.

They possess a number of fairly good horses and a few cattle.

They have sufficient farm implements for their requirements, and wagons and harness for freighting and hauling.

Characteristics and Progress.—These Indians are industrious and well-behaved. They have grown more farm produce than formerly and are improving their lands by fencing. One good log dwelling has been added during the year.

Religion.—These Indians all belong to the Anglican Church. They have one church building and are good attendants.

Bonaparte or Tluhtaus Band.

Reserves.—The reserves of this band, five in number, are located on the Bonaparte river, a tributary of the Thompson, and on Hat creek, a stream flowing into the Bonaparte. They contain six thousand one hundred and fourteen acres. The natural features are some brush lands along the creeks, benches, where irrigation is required, natural meadows and bunch-grass hills.

Vital Statistics.—The population is one hundred and fifty-nine. There have been eleven births and six deaths during the year.

Buildings, Stock and Implements.—The buildings are mostly old, small and poorly furnished inside and out. A few of the later constructed show an improvement. These Indians have a fair proportion of rather good horses, and some cattle. They are fairly supplied with farm implements, wagons, harness and saddles, according to their needs.

Resources and Occupations.—These Indians engage in farming and stock-raising, fishing and hunting, freighting and packing, and working for stockmen in the vicinity, as cowboys and farm hands.

Characteristics and Progress.—These Indians are fairly industrious, but they are unable to raise much on their reserve for lack of water for irrigation. They have to depend largely for a living on what they earn as labourers from place to place and are consequently unsteady in their habits and spend as they earn. They were able to grow better crops last season on account of a greater rainfall.

Religion.—These Indians all belong to the Roman Catholic church, and they have built recently a very respectable church edifice.

Health and Sanitary Conditions.—The health of these Indians has been good and sanitary conditions are favourable.

Deadman's Creek or Skichistan Band.

Reserve.—The reserve of this band is situated on Deadman's creek, an affluent of the Thompson, and extends from its mouth up some twelve miles.

The area of this reserve is twenty thousand one hundred and thirty-four acres.

The natural features consist of rolling bunch-grass benches and hills. The benches are suitable for cultivation if watered ; some brush and meadow lands higher up the creek. A magnificent grazing reserve, but unprotected by fencing.

Vital Statistics.—The population is one hundred and twelve. There have been eight births and six deaths during the year.

Health and Sanitary Precautions.—No epidemic has appeared among these Indians. Sanitary conditions are favourable and regulations have been attended to.

Buildings, Stock and Implements.—The buildings of these Indians are of a poor order, of log cabins, roofed with earth for the most part. The house built last winter is an improvement. They have fair-sized bands of good saddle horses and some cattle, also a fair proportion of farm implements.

Religion.—They all belong to the Roman Catholic Church, and have a good church edifice.

Characteristics and Progress.—These Indians are fairly industrious and law-abiding. They have become too much attached to the pursuit and life of cowboys to the neglect of the improvement of their own lands. While they make good wages at this occupation, they no not make any provision for the future. They last spring expended considerable in horses and provisions towards bringing a ditch into their land, but too late to be of use the present season. One good log house has been built.

Kamloops Band.

Reserve.—The reserve of this band is principally situated at the junction of the north and south Thompson rivers, immediately opposite the city of Kamloops. It contains thirty-three thousand three hundred and seventy-nine acres.

The natural features of this reserve consist of extensive river flats and benches, containing fine meadow and grain lands, with a sufficient and convenient quantity of water for irrigation purposes. The slopes facing the rivers are open bunch grass hills, furnishing excellent pasturage, and the mountains higher up are timbered.

Vital Statistics.—The population is two hundred and forty-three. There have been eleven births and nine deaths during the year.

Health and Sanitary Precautions.—No epidemic has appeared among these Indians, and the general health has been good. Sanitary regulations are fairly observed about their houses and village. The garbage accumulating during winter is collected and burned in spring, and as soon as the warm weather sets in, a majority of them remove to the fields and hills and live in tents. They have been vaccinated from time to time.

Resources and Occupations.—These Indians raise grain, hay, vegetables, horses and cattle ; they hunt and fish, and are extensively employed by neighbouring ranchers as farm hands and cowboys, in which latter occupation they employ their horses largely.

Buildings, Stock and Implements.—The houses and buildings of these Indians are comparatively of a poor class. Many of the mud-roofed cabins of twenty years ago still do service in a somewhat dilapidated condition. The buildings erected in recent years are of a much better class, but altogether they compare unfavourably with many others less favourably situated.

In stock the Indians have a large band of fairly good horses suitable for farm and saddle, and a few cattle.

They are well supplied with farm implements, ploughs, harrows, rollers, mowing machines, horse-rakes, wagons, sleighs, harness and saddles.

Religion.—They all belong to the Roman Catholic Church, have an elegant church, which they have rebuilt and enlarged during the year, making it probably the finest in the agency. I think it surpasses any in the city of Kamloops. They are regular attendants, strict adherents to the teachings of the church, and they have the presence of the priest much among them.

Characteristics and Progress.—The majority of these Indians are industrious, none of them may be said to be indolent, but many of them do too much running about, and consequently spend most of what they make, instead of improving their lands as they might do. They are devoting themselves more to the raising of hay and vegetables, which they dispose of in Kamloops at a fair price. There are few infractions of the law among them, outside of cases arising out of the liquor traffic

among them. I am pleased to say that, owing to the rigorous enforcement of the law in this respect, to the appointment of a paid Indian constable among the Indians, and to increased provincial police force, there has become apparent a marked improvement among these Indians. I might say in this connection that the Indians have built a lock-up in their village, where drunk or disorderly characters found on the reserve at night are confined until they can be brought over and handed to the authorities. The plan appears to be working well.

Chuckchuqualk Band.

Reserves.—The reserves of this band, four in number, are situated on the north Thompson river.

Three thousand two hundred and thirty-nine acres constitute the area of these reserves.

These reserves consist of large flats and low benches along the river banks, and of timbered slopes and mountains. The flats afford good tillable land, and the slopes furnish good summer grazing.

Vital Statistics.—The population is one hundred and twenty-two. There have been sixteen births and seventeen deaths during the year.

Health and Sanitary Conditions.—No epidemic has appeared among these Indians. The relatively large proportion of deaths among them have occurred almost exclusively among children, and can only be accounted for on the ground of unnecessary exposure during winter and to the miserable character of most of their houses.

Resources and Occupations.—These Indians engage in mixed farming, hunting and fishing, stock-raising, packing, and working as labourers at various occupations.

Buildings, Stock and Implements.—They have a fairly good church, and otherwise the poorest class of buildings in the agency.

They have a number of horses and cattle, and a fair supply of farm implements.

Religion.—All of these Indians belong to the Roman Catholic Church. They are exceptionally pious, and in the building line have pretty well exhausted their efforts in the erection of a church edifice.

Characteristics and Progress.—These Indians are industrious in their way, very inoffensive and law-abiding. They hunt more than many other bands, still they are making considerable progress in agricultural pursuits.

Neskainlith or Halaut Band.

Reserves.—The reserves of this band, three in number, are situated on the south Thompson river, three miles from the foot of Little Shuswap lake, and on Salmon arm.

Six thousand nine hundred and one acres constitute the area of these reserves.

The natural features are : on the Thompson, open bench lands, requiring irrigation, and good grazing lands on the slopes ; on Salmon arm, natural meadows and bottom, brush and timbered lands.

Vital Statistics.—The population is one hundred and forty-nine. There have been seven births and three deaths during the year.

Health and Sanitary Precautions.—The health of these Indians has been good, no epidemic has appeared among them, and they keep their houses and village clean.

Resources and Occupations.—Mixed farming, stock-raising, hunting and fishing, the cutting and rafting of wood, and working as labourers and woodmen, constitute the chief occupations of these Indians.

Buildings, Stock and Implements.—These Indians have very good buildings, mostly of cedar logs, and roofed with cedar shingles. They have good work and saddle horses, and a number of cattle, and are supplied with nearly every kind of farm implement and machinery.

Religion.—These Indians all belong to the Roman Catholic Church. They have one church building, and are good Indians.

Characteristics and Progress.—They are industrious and good workers, and they cause little trouble to the authorities. They have added largely to the tillable area of their reserve by reason of water-works for irrigation having been constructed, and are now in a position to do well. The improvement in this respect is very marked.

Adam's Lake or Haltkam Band.

Reserves.—The reserves of this band, six in number, are situated on the Thompson river, at the foot of Little Shuswap lake, on Adam's lake and on Salmon arm.

The combined area is seven thousand two hundred and eighty-three acres. The natural features are : on the Thompson river, extensive bench lands, requiring irrigation, and good grazing lands on the slopes of the mountains, with timber higher up ; at Adam's lake and Salmon arm, natural meadows, brush and timber lands.

Vital Statistics.—The population is one hundred and eighty-one. There have been fifteen births and seven deaths during the year.

Health and Sanitary Precautions.—The health of these Indians has been good. No infectious disease has appeared among them, and sanitary regulations are well carried out.

Resources and Occupations.—These Indians engage in mixed farming, stock-raising, hunting and fishing, the cutting and rafting to Kamloops of wood, and working as labourers for adjacent ranchers and woodmen.

Buildings, Stock and Implements.—These Indians have very good buildings of cedar logs mostly and roofed with cedar shingles.

They have good work and saddle horse, and some cattle and other domestic animals, and are well supplied with necessary and up-to-date machinery and implements for farming extensively.

Religion.—They all belong to the Roman Catholic Church. They have one church building, and are good-living people.

Characteristics and Progress.—These Indians are very industrious and good workers, and infractions of the law are almost unknown among them. They have added to their system of irrigation works, increased largely their acreage in crop and done considerable fencing and building improvements during the year.

Kuaut Band.

Reserves.—The reserves of this band, five in number, are situated at the head of Little Shuswap lake, Little river, and on Salmon arm.

The area of these reserves is seven thousand eight hundred and forty acres.

The natural features of these reserves are : at the head of the lake, small area of bench and open grazing land ; along the river flats and at Salmon arm, heavily timbered lands, requiring much labour to clear.

Vital Statistics.—The population is eighty-two. There have been seven births and three deaths during the year.

Health and Sanitary Precautions.—The health of these Indians has been good. No epidemic has visited them. Sanitary regulations are well observed in their houses and village.

Resources and Occupations.—These Indians carry on mixed farming ; they hunt and fish, derive some revenue from the sale of wood cut in the process of clearing land, and as labourers in various capacities.

Buildings, Stock and Implements.—These Indians have a superior class of buildings, mostly of logs, while several of them are boarded outside with rustic, and lined inside with dressed lumber. They are all substantial buildings, well finished, and roofed with shingles.

These Indians possess a fair proportion of horses and cattle, and they have sufficient farm implements.

Characteristics and Progress.—They are very industrious and hard-working Indians. As they are situated they have to work hard to make a living, and they are making commendable progress in clearing their land.

Education.—Children from most of the Thompson bands are attending the industrial school at Kamloops, and a system of shorthand Chinook has been introduced among them by the priest, in which many of them are able to correspond.

Temperance and Morality.—The Thompson Indians are as a class comparatively moral, but the tendency among some of the bands is towards intemperance. The Skichistin, Tluhtans and Kamloops bands have probably the worst reputation in this respect. I am convinced, however, that with the slight increase there has been made in the police force, and the vigour with which offenders have been prosecuted, this nuisance has to a considerable extent been abated.

NICOLA DISTRICT.

This district extends along the Nicola river and lake from Lower Nicola to Douglas lake, and includes the Hamilton creek and Coldwater reserves. It is occupied by the Quinshaatan, Quinskanaht, Naaik, Zoht, Nziskat, Spahamin and Hamilton creek bands.

Quinskanaht Band.

Reserve.—The reserve of this band is located along the Lower Nicola river. It contains four thousand five hundred and fifty acres. The natural features are bottoms and benches along the river, and grazing lands along the mountains.

Vital Statistics.—The population is fifty-two. There has been one birth and one death during the year.

Buildings, Stock and Implements.—These Indians have good substantial log houses, a number of horses and cattle, and farm implements sufficient.

Resources and Occupations.—These Indians farm and raise stock on a small scale, freight and pack, fish and hunt, mine a little, and work as labourers for white settlers.

Religion.—These Indians belong to the Anglican Church with the exception of four, who are Roman Catholics. They have no church.

Quinshaatan Band.

Reserve.—The reserve of this band is situated on the Coldwater, ten miles from its junction with the Nicola. It contains an area of six thousand two hundred and seventy-six and one-half acres. The natural features are bottom and bench lands along the river, and mountain grazing lands, lightly timbered.

Vital Statistics.—The population is one hundred and eleven. There have been two births and five deaths during the year.

Resources and Occupations.—These Indians farm considerably, and raise horses and cattle. They fish and hunt extensively, and are employed by neighbouring farmers as labourers and stock hands.

Buildings, Stock and Implements.—They have good log and frame houses, several horses and cattle, and are well supplied with farm implements.

Characteristics and Progress.—These Indians are industrious and exceptionally law-abiding. They have made good progress in clearing, cultivating and fencing their land, but are not as well off as some of the Nicola bands. They are well supplied with farm implements and machinery to carry on their farm operations.

Religion.—All but seven of these Indians belong to the Roman Catholic Church; seven are Anglicans. The Catholics have a good church and they are a very religious band.

Naaik Band.

Reserve.—The reserve of this band, called Mammet, is situated along the valleys and slopes of the Nicola and Mammet rivers. It contains eleven thousand five hundred and seventy-six acres.

It contains a happy combination of extensive brush and natural meadow lands along the rivers, extensive bench land, with abundance of water easily obtained for irrigation, and sloping bunch-grass foot-hills, with sufficient timber for all requirements.

Vital Statistics.—The population is one hundred and forty-one. There have been twelve births and eight deaths during the year.

Resources and Occupations.—These Indians raise considerable quantities of grain, hay and other farm produce. They have good horses, harness, wagons, sleighs, and packing outfits, with which they freight and pack extensively from points on the Canadian Pacific railway to Nicola, Similkameen and other places. They also procure ready employment, when not engaged in their own farming, among the numerous white settlers of the district. They do not hunt or fish as much as many other bands.

Buildings, Stock and Implements.—They have numerous houses and outbuildings of logs and frame, and of good quality. They have many good horses, which they are constantly improving, and considerable cattle and other domestic stock, for all of which they make good provision. With all necessary farm implements and machinery they are well supplied.

Religion.—A large majority of these Indians belong to the Anglican Church, the rest to the Roman Catholic. The Anglicans have a good church and are good attendants.

Characteristics and Progress.—These Indians are exceptionally industrious, and some of them are in consequence increasing in wealth. Their reserve is better fenced, cultivated and improved than any in the agency. They will shortly, at the present rate of progress, have all the tillable land under cultivation. During the year considerable land has been cleared and broken, several buildings erected and a number of implements acquired.

Zoht Band.

Reserves.—This small reserve is situated on Clapperton creek, near the foot of Nicola lake. It contains an area of six hundred and sixty acres. There is some bench land, inferior for cultivation, and fair grazing mountain slopes.

Vital Statistics.—The population is thirty-one. There have been two births and one death during the year.

Resources and Occupations.—These Indians do a little farming, and have a few horses and cattle. They do some hunting and fishing, but subsist more on the proceeds of the labour they do for white ranchers in the vicinity.

Buildings, Stock and Implements.—Their buildings are mostly of logs, and are fairly comfortable.

They do not possess much stock, chiefly horses, and they have farm implements sufficient for the amount of farming they do.

Religion.—They belong to the Anglican denomination, and have a small church.

Characteristics and Progress.—They are fairly industrious and law-abiding. Several of them are old, and but little progress is being made.

Nziskat Band.

Reserve.—This reserve is situated near the mouth of Coldwater river. It contains an area of three hundred and sixty-five acres.

It contains some wild meadow, a small proportion of light bench land, and the rest is inferior grazing and timber lands.

Vital Statistics.—The population is twenty-one. There have been two births and one death during the year.

Resources and Occupations.—These Indians have few natural resources. They farm a little and have some stock, chiefly horses. Some of the men are old and one of them is blind. It is remarkable the amount of freighting the latter does, with a boy or girl as guide. In other ways, by fishing and hunting, and by the assistance of their women and children, they manage to get along, but are unable to make much progress.

Religion.—Eleven of them belong to the Anglican, and ten to the Roman Catholic Church. They have no church building.

Spahamin Band.

Reserves.—The reserves of this band, eight in number, are situated chiefly on the Nicola and Douglas lakes and Spahamin creek.

They contain a combined area of thirty thousand eight hundred and eighty-eight acres.

Along the river bottoms and by the margin of the lakes, brush land and low, open flats and natural meadow lands; on the lower foot-hills, some bench lands suitable for cultivation, and magnificent stretches of undulating bunch-grass grazing lands, with sufficient timber along the river and towards the base of the mountains.

Vital Statistics.—The population is one hundred and eighty-five. There have been nine births and four deaths during the year.

Resources and Occupations.—These Indians engage in mixed farming, stock-raising, cattle and horses—the latter extensively—fishing and hunting, freighting and packing, and working as labourers and cowboys for the neighbouring stock-raisers.

Buildings, Stock and Implements.—They have mostly good houses and buildings, well furnished and well kept. The buildings erected in recent years are a decided improvement on older ones.

These Indians are the most extensive stock-raisers in the agency, and have the best quality. Some of the best stallions and brood mares to be found in the province are owned by these Indians. Their cattle are also of a high grade.

They are well supplied with farm implements of every description.

Religion.—These Indians all belong to the Roman Catholic denomination. They have two fine churches, and are earnest worshippers.

Characteristics and Progress.—Taken as a whole, they are an exemplary band of Indians. They are probably the wealthiest and most independent in the agency. They have a large tract of range land fenced, and they are constantly adding to it. During the year they have done considerable fencing, cleared eighteen acres of land, and added some to their houses and implements.

Hamilton Creek Band.

Reserve.—This reserve is located on Hamilton (or Quelchena) creek, about ten miles from its mouth. It was originally intended as a grass reserve for the Lytton bands, and is occupied mostly by Indians from these bands.

It contains an area of four thousand four hundred and forty acres.

It largely consists of open, rolling bunch-grass lands, with small benches and flats along the creek suitable for cultivation.

Vital Statistics.—The population is thirty-eight. There have been four births and six deaths during the year.

Buildings, Stock and Implements.—The buildings on this reserve are few, and consist of small log houses.

The Indians have a number of cattle and horses, which, owing to the favourable character of the locality, require little provision or attention during winter.

They have sufficient farm implements.

Religion.—They mostly belong to the Anglican denomination, a few to the Roman Catholic Church. They have no church building and are seldom visited by a clergyman.

Temperance and Morality.—The Indians of Nicola district are comparatively moral and temperate.

Health and Sanitary Precautions.—The general health of these Indians has been good. With the exception of a slight outbreak of enteric fever among the Spahamin band during early spring, which resulted in the death of one Indian of Spahamin and one from Zoht, who happened to be at the former place, no epidemic has appeared among them. Sanitary conditions are good, and the regulations are well carried out. The Indians keep their houses fairly clean and orderly, and gather up and burn the garbage which accumulates about their villages. To some extent they live in tents during the summer. Vaccination has been well attended to.

Education.—A very limited number of children of this district are receiving the benefits of instruction afforded by attendance at the industrial school at Kamloops. They have also a system of shorthand Chinook, in which a number of them are able to correspond.

SIMILKAMEEN DISTRICT.

This district extends along the Similkameen river, from Princeton to the international boundary line, and it is occupied by the Chuchuwayha, Ashnola and Shennosquankin bands.

Chuchuwayha Band.

Reserve.—This reserve is situated on both banks of the Similkameen, principally in the neighbourhood of Twenty-mile creek.

It contains, according to plans completed, five thousand seven hundred and ninety-two acres. (Some of the plans are not completed.)

At the junction of Twenty-mile creek with the Similkameen, the canyon of the latter opens out into some nice benches, chiefly on the left bank, which are well watered

and well adapted for cultivation. Back of the benches, on the steep mountain sides, there is considerable open or sparsely timbered land, which affords good summer pasturage.

Vital Statistics.—The population is fifty-two. There have been two births and two deaths during the year.

Resources and Occupations.—Farming and stock-raising, hunting and fishing, mining and packing are the chief occupations. The last mentioned trade has greatly increased, as mining properties are being developed in different sections of the Similkameen. A wagon road has recently been completed from Princeton to Keremeos.

Religion.—These Indians all belong to the Roman Catholic denomination. They have a church, and for the past year have been visited regularly by a priest who has taken up mission work among them.

Buildings, Stock and Implements.—Their buildings are mostly of logs, and they are fairly comfortable.

They have a number of good horses for packing and riding ; some cattle and hogs, and are well supplied with implements to conduct their farm operations. More wagons are coming into use among them.

Characteristics and Progress.—These Indians are industrious and law-abiding. They are making progress in farming, the incentive being greater than formerly, as they have now a good market for hay, grain and vegetables.

Ashnola Band.

Reserve.—This reserve is situated on the Similkameen, chiefly on the right bank, at the mouth of Ashnola creek. It adjoins Chuchuwayha, and extends to near Keremeos.

It contains ten thousand two hundred and five acres.

The natural features are : brush, natural meadows and bench lands, the latter requiring irrigation, along the river bottoms and banks, and sheep mountain slopes, open or thinly timbered, affording good summer pasturage.

Vital Statistics.—The population is fifty-four. There have been two births and one death during the year.

Resources and Occupations.—These Indians engage in mixed farming, hunting and fishing, stock-raising and working for stockmen as cowboys, in which occupation they employ their horses.

Buildings, Stock and Implements.—These Indians have a fair class of log houses, a number of good horses and cattle, and they are fairly provided with farm implements. As they have some fine natural meadows, they are able to provide well for their stock during winter.

Religion.—These Indians all belong to the Roman Catholic Church. They have no building. A priest has been appointed to visit them periodically.

Characteristics and Progress.—They are industrious and well-behaved, and are generally well-to-do. They are making good progress in farming, clearing and fencing their lands.

Shennosquankin Band.

Reserve.—This reserve extends along the Similkameen valley from Keremeos to the boundary line.

It contains an area of nine thousand six hundred and sixty-seven acres.

There are extensive brush and meadow lands along the river bottoms, some higher bench lands requiring irrigation and mountain pasture lands.



GROUP OF INDIANS BELONGING TO THE KWAWKEWLTH AGENCY, B.C.

Vital Statistics.—The population is seventy-three. There have been five births and three deaths during the year.

Resources and Occupations.—The principal occupations of these Indians are farming, principally the raising of hay, stock-raising, hunting and fishing, some packing and freighting and employment as labourers and stock-hands with neighbouring ranchers.

Buildings, Stock and Implements.—These Indians' houses are built of logs and many of them are roofed with earth. They are not pretentious, but are warm in winter. The Indians have good bands of superior horses and herds of cattle. They are also well provided with farm implements.

Religion.—They all belong to the Roman Catholic Church ; have one building and are good people.

Characteristics and Progress.—These Indians are very industrious and law-abiding, and several of them are accumulating considerable wealth in the way of stock, selling each year a number of cattle, besides horses.

They are making good progress in farming, improving and providing for their stock.

Temperance and Morality.—These Indians (Similkameen) have been fairly temperate and moral. In recent years liquor licenses have been granted, without adequate police protection, in the vicinity of some of these reserves ; a large immigration of miners and prospectors has been coming into the country, and the effect morally has not been for the good of the Indians. Still, no serious trouble has occurred during the past year.

Health and Sanitary Precautions.—The general health of these Indians has been good. No epidemic has appeared among them. Sanitary conditions are good, and most of the Indians have been vaccinated.

Education.—They are without any means of education, except that afforded two or three of the children of Shennosquankin, who have been attending the public day school at Keremeos.

OKANAGAN DISTRICT.

This district extends from the head of Osoyoos lake along the Okanagan river and Okanagan lake to the head of the latter, and includes the Spallumcheen band. It is occupied by the Nkamip, Penticton, Nkamaplix (including the mission bands Duck lake and Kelowna), and the Spallumcheen bands.

Nkamip Band.

Reserve.—This reserve is situated around the head of Osoyoos lake, and extends up the east side of the Okanagan river.

It contains an area of thirty-two thousand and one hundred and sixty-eight acres.

It consists largely of bunch-grass prairie and bunch-grass hills. There is some natural meadow bordering on the lake, and higher bench land along Gregoire creek, and some distance back from the Okanagan river. These bench lands, when watered, are well adapted for growing grain and fruit.

Vital Statistics.—The population is sixty-three. There has been one birth and one death during the year.

Resources and Occupations.—These Indians engage in mixed farming, stock-raising, hunting and fishing, freighting and packing, and employment as farm-hands and stockmen.

Buildings, Stock and Implements.—These Indians have a fair class of log and frame houses, good bands of horses, a fair proportion of cattle, and are well provided with farm implements.

Religion.—They all profess the Roman Catholic faith. They have one church, and for the past year have been visited periodically by the priest. They are religious people.

Characteristics and Progress.—They are fairly industrious and law-abiding. Numerous small orchards of mixed fruits—apples, plums, pears, peaches, cherries—have been planted, and all bearing well. Strawberries are also grown quite extensively. These Indians are making steady progress in farming.

Penticton Band.

Reserve.—This reserve is situated at the southwest end of Okanagan lake, and stretches south on the west bank of the Okanagan river and Dog lake. It lies between Trout creek on the north and Marro creek on the south, with Nos. 2 and 3 reserves adjoining. It contains forty-eight thousand and six hundred and ninety-four acres.

It consists of extensive natural meadow and bottom lands at the foot of Okanagan lake, and along the Okanagan river to Dog lake ; higher up there are bench lands, admirably adapted for growing grain and fruit, with good water facilities, and magnificent grazing lands on the foot-hills.

Vital Statistics.—The population is one hundred and forty-two. There have been nine births and three deaths during the year.

Resources and Occupations.—In the growing of grain, hay and fruit of all kinds, and stock-raising, the resources of these Indians are practically unlimited. Besides they have good hunting and fishing, freighting and packing, and ample opportunities of making a living by working for neighbouring ranchers.

Buildings, Stock and Implements.—They have a fair class of log and frame houses, good bands of horses, and small herds of cattle, also farm implements sufficient.

Religion.—These Indians all belong to the Roman Catholic Church. They have one building ; they have been more frequently visited by the priest during the year, and evince a lively interest in church matters.

Characteristics and Progress.—A number of these Indians are industrious, and evince quite an interest in keeping up a nice home and garden, and in looking after their farms. Others had become too much addicted to drink, and spent too much of their time in running about. Matters reached a climax early in the year, when an Indian, Antoine, was killed as the result of a drunken row. A constable was immediately appointed and stationed near the reserve. Since then there has been a marked improvement in the conduct of the Indians, and the law is being enforced.

They are making good progress in farming and fruit-growing.

Nkamaplix Band.

Reserves.—The reserves of this band, ten in number, are situated principally around the head of Okanagan lake, and along or adjacent to its shores. They contain a combined area of twenty-nine thousand seven hundred and ninety acres. There are some natural meadow lands along the lake shores, extensive, receding benches, admirably adapted for grain-growing, and requiring little, if any, irrigation, with excellent grazing lands on the surrounding slopes and hills.

Vital Statistics.—The population (including Duck lake and Okanagan lake) is two hundred and thirty-six. There have been twelve births and thirteen deaths during the year.

Resources and Occupations.—These Indians farm more extensively than any others in the agency. They raise horses, cattle and hogs. They hunt and fish to a limited extent, and work as labourers in various ways, deriving quite a revenue from hop-picking alone, which industry is conducted on a large scale in the immediate vicinity. They are exceptionally well supplied with all kinds of modern machinery and implements, having last year (fall) purchased a steam threshing-machine—the only one of the kind in use among the Indians.

Religion.—All but one, who is classed as a pagan, belong to the Roman Catholic denomination. Some are very zealous ; others show little concern in religious matters. They have three churches. A remarkable feature about these churches is that one of them has been built by Chief Louie Jim, who is classed as a pagan, and he maintains a form of worship of his own.

Characteristics and Progress.—These Indians are industrious and are becoming good farmers. A marked improvement is noticeable about their reserve, and their condition financially is improving. They have made good progress during the year. The purchase of a steam thresher will retain among them a large amount of cash which heretofore was paid to white men to do this work.

Spallumcheen Band.

Reserves.—The reserves of this band, three in number, are situated in the Spallumcheen valley, and on the Spallumcheen and Salmon rivers. They have a combined area of nine thousand six hundred and eighty-one acres.

On the Spallumcheen, there are open prairie and densely timbered flats ; on the Salmon river, mostly bunch-grass prairie. No irrigation is required on these reserves.

Vital Statistics.—The population is one hundred and thirty-two. There have been five births and two deaths during the year.

Resources and Occupations.—These Indians depend largely on farming. They raise some horses, cattle and pigs, hunt and fish, and work as labourers for neighbouring farmers. They also make a good deal of money at hop-picking, and from the sale of wood in the winter-time, which is cut from land in the process of clearing. They are well supplied with implements and vehicles.

Religion.—They all belong to the Roman Catholic Church, have an excellent church building, and are good-living and remarkably honest people.

Characteristics and Progress.—They are very industrious and law-abiding. They are improving their land by growing more hay and by clearing new land. They are progressive and up-to-date Indians.

Temperance and Morality.—All of the Okanagan Indians are comparatively moral and fairly temperate. Some among them are addicted to drink when they have an opportunity, and this is but too frequent ; still, as a whole, the traffic of liquor among Indians is fairly under control. The Spallumcheen band has the best record in this respect.

Health and Sanitary Precautions.—No epidemic has appeared among these bands, and the general health has been good. Sanitary conditions are good, regulations well observed, and Indians have been vaccinated from time to time.

Education.—There is no system of education among these Indians, except that an occasional one may attend the industrial school at Kamloops.

GENERAL REMARKS.

In addition to the resources of Indians mentioned, the women of the various bands assist very much, apart from their domestic duties, in the manufacture of deer-skins into buck-skin, which they sell or make into articles of clothing, moccasins, mitts and gloves, for wear or for sale ; by making baskets of cedar roots, mats of rushes, of which they make summer tents and carpets, gathering wild berries for food or for sale, and by working for white people as domestic servants. An Indian woman is rarely idle.

The industrial school at Kamloops has been operated to its fullest capacity, and the pupils have made good progress in their studies and trades, general appearance and address. The principal and teachers of this institution are diligent, energetic and painstaking.

The Indian hospital at Lytton has benefited many Indians, and is carefully managed and looked after by the secretary, Rev. R. Small, and nurse, Miss Bine. Dr. Wade, of Kamloops, visits the hospital monthly.

The Indians as a whole are steadily, and in some cases rapidly, improving, and adapting themselves to a civilized mode of life. The change in this respect might not be so apparent from year to year, but if followed back for the last twenty or more years, it is remarkable.

I have, &c.,

A. IRWIN,
Indian Agent.

BRITISH COLUMBIA,
KOOTENAY AGENCY,
FORT STEELE, July 25, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location of Agency.—The agency is situated in the southeast portion of British Columbia, and is bounded by the Rocky mountains on the north and east ; by the United States territory on the south ; and by the Okanagan agency on the west.

Reserves.—The reserves in the agency contain an aggregate of forty-two thousand and sixty-one acres, made up as follows :—

The St. Mary's reserve, situated on the right bank of the Kootenay river, at the mouth of the St. Mary's river, has an area of seventeen thousand four hundred and twenty-five acres;

Isidore's ranch contains six hundred and eighty acres ;

Cassimayook's, in the Kootenay valley, has an area of one hundred and sixty acres ;

Bummer's Flat hay reserve, on the left bank of the Kootenay river, three miles above the mouth of the St. Mary's river, contains one hundred and ninety acres ;

The Tobacco Plains reserve, adjacent to the international boundary near the State of Montana, has an area of ten thousand five hundred and sixty acres ;

The Columbia Lake reserve, situated in the Columbia valley between Lakes Fairmount and Windermere and the Rocky mountains, contains eight thousand four hundred and fifty-six acres.

The Lower Kootenay reserve is in the west Kootenay district, on the right bank of the Kootenay river, about three miles north of the Idaho boundary line, and has an area of one thousand eight hundred and thirty-one and a half acres.

The Shuswap reserve is situated on the right bank of the Columbia river, opposite the mouth of Toby creek, in the Windermere district of East Kootenay, and contains two thousand seven hundred and fifty-nine acres.

In addition, the industrial school reserve has thirty-three acres, and there is a reserve of eleven and one-half acres at the Indian office near Fort Steele.

Health and Sanitary Precautions.—The Indians enjoyed good health during the past year. There has been no epidemic amongst them, the deaths that occurred being from ordinary causes. Vaccination was attended to, as small-pox was prevalent amongst the United States' Indians south of the international boundary line and amongst the whites in several towns in the district. A strict quarantine was kept up to prevent the disease spreading. The usual spring cleaning was carried out at the St. Eugene's Indian village. The refuse was removed and burned.

Resources and Occupations.—In the St. Mary's band, stock-raising, farming, hunting, fishing, packing to the mines, and herding cattle are the principal occupations of these Indians. They find a ready sale for all the hay and vegetables they can raise.

The Indians of the Tobacco Plains band depend largely now upon farming and cattle-raising. They do a little hunting and fishing. The Crow's Nest Railway Company is extending its line to the international boundary from the Fernie coal-fields, which will give the Indians a good market for all the produce they can raise. Recently an irrigation ditch of about two and a half miles was built to cover the bench lands, which will ensure them good crops, and enable them to put a larger area of land under cultivation.

The Lower Kootenays depend chiefly on hunting and packing to the mines for a living. A few of them are beginning to raise cattle. They generally put up sufficient hay to carry the stock safely through the winter. Some cultivate little gardens, and are succeeding fairly well. During the year they visit the mining towns around the Kootenay lake and earn a good deal of money by picking and selling berries. The women make moccasins and gloves, which they dispose of readily to the miners.

The Columbia Lake Kootenays make their living by cattle-raising and farming. Hay, grain and vegetables bring good prices at the mines, which are only a few miles distant from the reserve.

The Shuswap Indians depend chiefly on farming and cattle-raising. A few hold and work mineral claims, which they generally sell at a good price. They raise good crops, principally hay and grain, which are in demand. Their reserve is the best farmed one in the agency, and they keep their fences in excellent repair.

Buildings.—An improvement is noticed in the few new buildings recently erected, the low log cabin giving place to a neat frame cottage. At St. Eugene's village and the Shuswap reserve, dwellings of a better class have been built. More attention is given to sheds for cattle, horses and implements, and on several of the reserves good barns have been erected.

Stock.—The Indians throughout the agency are making an effort to improve their stock. The Shuswaps have several well-bred stallions amongst their band, and a better class of horses is being raised. The same can be said of the Columbia Lake Kootenays, the Tobacco Plains and the St. Mary's bands. Now that we have excellent facilities for getting in stock by the railway, I look forward to our Indians being able to purchase a few thorough-bred bulls, so that they can improve their cattle.

Farming Implements.—More attention is given to the care of farming implements, and those whose means will permit provide themselves with reapers, mowers, rakes and ploughs, which are carefully housed in the winter. There is a threshing-machine on the Shuswap reserve, purchased and owned by the Indians.

Education.—The industrial school at St. Eugene's village was well attended during the year. The progress made by the pupils was most satisfactory. The boys are taught useful trades, farming and the care of stock ; the girls housekeeping, dairying, cooking, the use of the sewing-machine, knitting, and the making and mending of nearly all the clothing used in the institution.

The parents of the pupils visit the school regularly, and appear to take a great interest in their progress. No difficulty is found in keeping up the attendance, and there is great anxiety shown by the Indians to get their children admitted. Very great credit is due to the Rev. Principal Coccola and his assistants, the Sisters of Charity, who work faithfully and zealously to keep the institution up to a high state of proficiency.

Religion.—All the Indians in the agency are Roman Catholics and attend the services of their church regularly. There are five churches, the largest at the St. Eugene's village, where the Indians of the different reserves meet and celebrate the great festivals of the church, especially Christmas, Easter and Corpus Christi. The reverend fathers visit the different reserves from time to time and hold services, which are well attended. In their absence the Indians gather at the church on the reserve every Sunday, when services are conducted by the chief or some one carefully instructed in his religious duties, and selected for his good moral and religious character.

Characteristics and Progress.—The Indians of the agency are industrious, and many of them are becoming good farmers. In fact, a number of them will compare favourably with their white neighbours. Amongst those who are steadily advancing may be mentioned Luke, Adrian, and Chief François, of the St. Mary's band ; Louis Stowekin, Isaac and Baptist Paul, of the Shuswaps ; François and Chief Paul, of the Tobacco Plains band ; Terry and Joseph, of the Columbia lakes ; and Anastas and Little Cyrus, of the Lower Kootenays.

Temperance and Morality.—I am pleased to be able to say that without exception the Indians of this agency are the most temperate and moral I know of. They use no intoxicants. They are law-abiding and industrious, and their progress is most satisfactory.

I have, &c.,

R. L. T. GALBRAITH,
Indian Agent.

BRITISH COLUMBIA,
KWAWKEWLTH AGENCY,
QUATHIASKI COVE, August 2, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report together with inventory of government property in my charge, for the year ended June 30, 1901,

Location of Agency.—This agency includes all the Indian villages and reserves that lie between Cape Mudge, on Valdez island, gulf of Georgia, and Smith's sound, on the mainland of British Columbia, and all the villages and reserves in Quatsino sound, on the west coast of Vancouver island.

Area of Reserves.—The area of the reserves is seventeen thousand and fifty-two acres, the greater part of which is rocky, worthless soil.

Tribe or Nation.—All these Indians belong to branches of the Kwawkewlth nation.

Vital Statistics.—The combined population of all the bands in this agency is one thousand five hundred and four, including men, women and children.

Health and Sanitary Precautions.—The health of the Indians generally has been good during the last twelve months. No epidemic has appeared among them. There is a decided improvement in the cleanliness of their houses, particularly among the younger members of the different bands.

Resources and Occupations.—These Indians engage in hunting and fishing, cutting timber for saw-logs, work at the canneries during the fishing season, act as guides and canoemen to tourists and prospectors. The women make cedar bark mats and baskets, and a few of the men among them work in silver and gold, making bracelets, rings, broaches, &c., which find a ready sale. They can nearly always obtain an unlimited quantity of fish for both summer and winter use, and also a large quantity of oulachon oil, which they eat with everything and which is a most nutritous article of food. A few among them go fur-sealing. Very little attention is given to agricultural pursuits ; much of the soil of most of the reserves being gravelly and worthless.

Buildings, Stock and Farming Implements.—A large number of the houses are still built in the old style, of split cedar boards, and are roofed with the same ; but there is an increase every year in the number of good comfortable frame houses built and inhabited by the younger people. No stock of any kind, except a few pigs, is owned by these Indians. The old chief at Campbell River reserve, who sold all his cattle a year ago on account of their being so wild, could not resist the temptation when he had the money to distribute it among his friends, instead of buying some young stock.

They own few farming implements, except hoes, spades and mattocks.

The ease with which these Indians obtain a living in various ways, prevents them from engaging in agricultural pursuits.

Education.—There are three day schools, one industrial school for boys, and one boarding school for girls in this agency. The attendance at all these schools has been fairly good, but there is still a good deal of opposition shown by the parents to their children attending the schools. There is no lack of intelligence in the pupils, as is shown by these who attend regularly, who make good progress. The industrial school at Alert Bay does excellent work under the able management of Mr. A. W. Corker, ably seconded by Mrs. Corker, who acts as matron. Mr. W. M. Halliday continues as trades instructor and band-master, and the boys under his charge are making good progress. Mrs. A. J. Hall is indefatigable in her postion as teacher in the Indian day school, and girls' boarding school at Alert Bay, which is proved by the great progress made by the pupils.

Religion.—Regular services are held in Christ church, Alert Bay, by the Rev. A. J. Hall, Anglican missionary, the attendance generally being very good. Services are also conducted every Sunday by Mr. E. A. Bird at Quace, and Mr. R. J. Walker, Methodist missionary at Cape Mudge, but as yet the majority of the bands in this agency do not show much interest in religion.

Temperance and Morality.—There has been, I am sorry to say, a good deal of intemperance among some of the bands in this agency. The licensing of several houses, and the number of men employed in the logging camps in the vicinity of some of the reserves, are chiefly answerable for this, as also the great want of proper police supervision.

There is, I think, an improvement in the morals of these people generally, but there is still much to be desired in this respect.

Characteristics and Progress.—The Indians in this agency generally are law-abiding and fairly industrious. No serious crimes have been committed. That they do not make as much progress as one could desire, must be put down in a great measure to their surroundings, and the ease with which they can obtain a comfortable living. There is a decided improvement in their way of dress and also in a less degree in their houses and manner of living.

I have, &c.,

R. H. PIDCOCK, *Indian Agent.*

BRITISH COLUMBIA,
NORTHWEST COAST AGENCY,
METLAKAHTLA, August 5, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward this day my annual report of Indian affairs in the Northwest Coast agency for the year ended June 30, 1901.

My statistical statement and government property list will follow in due time.

Population.—The population, although slightly decreased at some places, notably the Nass river settlements, has throughout the agency increased in number during this year. The total Indian population is now four thousand one hundred and forty-one, an increase of ten for the year. During the ten years just ended there has been an increase of one hundred and thirty.

The natural increase of births over deaths is greater than appears, because of occasional emigration of Haida Indians from Massett to Alaska. There is a Haida settlement in the Alaska territory, which seems to attract some of our Haida Indians nearly every year, and whch renders the count of the Massett band fluctuating.

Agriculture.—There is a gradual increase of agricultural products amongst the Indians, principally potatoes. The Indians of the Upper Nass river valley are growing more and more potatoes each year, and are now supplying quantities to the salmon canneries.

There is also a noticeable increase in the number of cattle and horses owned by Indians

The members of the Aiyansh band on the Upper Nass river have expressed a desire to secure individual allotments, of ten acres each man, of arable land on their reserve for agricultural purposes on a more extended scale, and to raise cattle, sheep and horses thereon.

The Indians of Queen Charlotte island, although they have but little agricultural land, have very good cattle runs, where large numbers can find food and shelter, in the woods, all the year round. Their stock of cattle and horses are increasing yearly. They occasionally ship fresh beef by schooner or sail-boat to the mainland settlements for sale, and for this they find a ready market.

The Indians on the mainland coast are precluded from following agricultural pursuits on account of the scarcity of arable land, and are mostly dependent for a living upon fishing, hunting, trapping, cutting timber for saw-mills, boat-building, salmon-canning, freighting and other industries and enterprises carried on by white men.

Many Indians have, alone, and in companies, gone into the business of store-keeping and other forms of trade and enterprise, but have had little success, owing partly to their lack of confidence in each other, family jealousies, lack of business experience, and a too costly manner of living. Some of the younger generation are, however, rapidly gaining business experience, and are in a measure able to keep business accounts.

Health and Sanitary Precautions.—The general health of the people is good, although much mortality has occurred through consumption and other pulmonary diseases during the year, especially so amongst the Nishgar tribes in the Nass river valley.

A mild type of small-pox reached the Nass river at Kincolith Indian village in

the month of May, brought hither from Alaska by an Indian family who visited Kincolith and Fishery bay, and immediately returned to Alaska. The result was the infection of a family of six Indians at Kincolith, and one Indian woman at Fishery bay. This woman ignorantly carried the disease from Fishery bay to Skeena river, where fourteen Indians caught the infection. It was, however, confined to those few, although there were not less than three thousand Indians mingling together at Skeena river during this time. Fortunately the disease was not allowed to spread further, and by the end of June it was entirely stamped out. No deaths resulted from this invasion of small-pox, save one, a puny infant whose mother had the disease.

Great praise is due to the Venerable Archdeacon Collison, Mr. John Flewin, provincial government agent, and Doctors Gibbs, Bolton, Wrinch and Ardagh, of Skeena river, and Doctor Large, of Rivers inlet, for their active help in checking and stamping out the contagion. The promptitude of the departmental officers at Victoria, in dispatching medicines and help to this agency, assisted us largely in overcoming the spread of the disease. The managers of the salmon canneries also, at Skeena and Nass rivers, promptly placed their cannery steamers and crews at the disposal of the officers and doctors whenever needed. Within two weeks about four thousand Indians including those from Alaska and the Babine agency, were vaccinated, irrespective of whether or not they had been already vaccinated within seven years.

Sanitary matters throughout the agency have received the usual attention from the Indian councils and chiefs, who have rendered the agent great assistance in keeping the Indian villages and houses in a good measure clean and wholesome.

Education.—There is no diminution of the efforts of the missionary teachers and the government teachers in the education of the Indians of this agency. Some of the most promising of the half-breed children are now being educated at the provincial public school established at Port Simpson some years ago, and at Metlakahtla this year.

I have, &c.,

C. TODD,
Indian Agent.

BRITISH COLUMBIA,
WEST COAST AGENCY,
ALBERNI, September 23, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report to June 30, 1901.

Agency.—The West Coast agency extends from Otter point to Cape Cook, comprising two hundred miles of the west coast of Vancouver island.

Reserves.—There are eighteen tribes in this agency. They have one hundred and fifty reserves and fishing stations, aggregating twelve thousand four hundred and twenty acres ; five acres per capita of population. There are two large reserves in Barclay sound, one at Alberni, belonging to the Tseshaht tribe, containing one thousand and thirty acres, mostly good land, and the other at Numakamis, Sarita valley, belonging to the Oiaht tribe, containing one thousand seven hundred acres. There is good bottom land at the mouth, and along the banks of the Sarita river, but part of this reserve is unfit for cultivation and contains large deposits of iron and copper. Sixty-seven acres of this land is leased for mining purposes for the benefit of the band. The acreage of the other reserves, ranges from two acres to two hundred and fifty acres

each. These reserves are mostly rocky, timbered and tidal lands, given for village sites and fishing stations, with only small patches of land suitable for cultivation.

Principal Reserves.

Tseshaht, No. 1 Reserve.—Tsahaheh, west bank of the Somas river, Alberni, one thousand and thirty acres. The population consists of one hundred and thirty-four men, forty women and fifty children.

Opitchesaht, No. 1 Reserve.—Ahahswinis, east bank of Somas river, Alberni, ninety-six acres. The population consists of sixty-four—fifteen men, twenty-three women and twenty-six children.

Howchucklisaht, No. 2 Reserve.—Elhlateese, at the head of Howchuklesit harbour, Alberni canal, four hundred acres. The population consists of forty-seven—fifteen men, eighteen women and fourteen children.

Oiaht, Nos. 7 and 8 Reserves.—Ahadzooas, part of Diana island, one hundred and fifteen acres, and Haines' island, thirty acres, eastern entrance of Barclay sound. The population consists of one hundred and sixty-three—fifty-five men, sixty women and forty-eight children.

Toquaht, No. 1. Reserve.—Mahcoah, Village passage, Barclay sound, one hundred and twenty-four acres. The population conists of twenty-one—nine men, eight women and four children.

Ewlhuilhlaht, No. 1 Reserve.—Ittatso, Ucluelet arm, Barclay sound, one hundred and sixty-two acres. The population consists of one hundred and fifty-six—fifty-four men, forty-seven women and fifty-five children.

Clayoquot, No. 1 Reserve.—Opitsat, Clayoquot sound, one hundred and eighty acres. The population consists of two hundred and forty—eighty-three men, ninety-seven women and sixty children.

Kelsemaht, No. 11 Reserve.—Yahksis, Flores island, Clayoquot sound, one hundred and eighty acres. The population consists of seventy-one—twenty-eight men, twenty-six women and seventeen children.

Ahousaht, No. 15 Reserve.—Mahktosis, Matilda creek, Clayoquot sound, two hundred and fifty acres. The population consists of two hundred and seventy-seven—eighty-eight men, eighty-seven women and one hundred and two children.

Heshquiaht, No. 1 Reserve.—Heshque, Heshquiaht harbour, two hundred and twenty-two acres. The population consists of one hundred and fifty-four—forty-four men, fifty women and sixty children.

Mooachaht, No. 1 Reserve.—Yuquot, Friendly cove, Nootka sound, two hundred and ten acres. The population consists of one hundred and eighty-five—sixty-six men, seventy-five women and forty-four children.

Matchitlaht, No. 15 Reserve.—Cheshish, back of Bligh island, Nootka sound, twenty-nine acres. The population consists of sixty-two—twenty-one men, twenty-five women and sixteen children.

Noochahtlaht, No. 1 Reserve.—Nuchatl, Esperanza inlet, sixteen acres. The population consists of seventy-five—thirty-seven men, twenty-seven women, and eleven children.

Ehattishat, No. 10 Reserve.—Oke, Esperanza inlet, thirty-two acres. The population consists of one hundred and one—thirty-nine men, thirty-four women and twenty-eight children.

Kyukaht, Nos. 1 and 2 Reserves.—Aktese, Village island, one hundred and eighteen acres. Kukamukamees, Mission island, seventy-five acres ; Barrier island, Kyuquot. The population consists of three hundred and forty-one—one hundred and forty-five men, one hundred and thirty women and sixty-six children.

Chaicclesaht, No. 1 Reserve.—Acous, Battle bay, Ououkinsh inlet, one hundred acres. The population consists of one hundred and eighteen—forty-three men, thirty-seven women and thirty-eight children.

Nitinaht Tribe.

These Indians live in four villages at the entrance of Juan de Fuca strait, viz. :

Tsooquahna, No. 2 Reserve.—Two hundred and thirty-five acres. The population consists of twenty-five—nine men, nine women and seven children.

Wyah, No. 3 Reserve.—One hundred and thirty-two acres. The population consists of sixty-five—twenty-four men, twenty-three women and eighteen children.

Clo-oose, No. 4 Reserve.—Two hundred and forty-eight acres. The population consists of sixty-nine—twenty-two men, twenty-three women and twenty-four children.

Carmanah, No. 6 Reserve.—One hundred and fifty-eight acres. The population consists of fifty-two—fifteen men, twenty women and seventeen children.

Nitinaht Villages.—Each of these four villages has its own chief, but there is one head chief of the Nitinaht tribe, who resides at Wyah, and to this village nearly the whole of the tribe resort for the fall salmon-fishing, and congregate there part of the winter. Wyah village is situated at the mouth of Nitinaht lake, which is really an inlet with narrow entrance from the sea ; into this inlet, which is nearly five miles long, flow the streams from which, with the Chawit river on Clo-oose reserve, these Indians get their supply of salmon.

Pacheenaht, No. 1 Reserve.—Pacheena village, Port Renfrew, situated at the mouth of the San Juan river, contains one hundred and fifty-three acres. The population consists of sixty-three—eighteen men, twenty-seven women and eighteen children. The Pacheenahts are a distinct tribe from the Nitinahts, with their own chiefs, but are allied to them and speak the same dialect, and at sealing time all the Nitinahts assemble at Pacheena village, Port Renfrew, being the only harbour on their coast.

General Remarks.

Vital Statistics.—The population of the whole agency is two thousand four hundred and seventy-nine—eight hundred and seventy men, eight hundred and eigthy-six women and seven hundred and twenty-three children. I have counted those over sixteen years of age with the men and women, as most of them marry and have children before they are twenty. Number of births for the year, seventy-seven ; number of deaths, ninety ; birth-rate, thirty-one per thousand ; death-rate, thirty-six ; this shows a decrease in the population of thirteen, but owing to a migration of ten, among others two widows with children having married into these tribes from other agencies, the census only shows a decrease of three ; in more than half the band the deaths are in excess of the births. The Ahousahts numbering two hundred and seventy-seven show the most vitality, the births this year being eighteen, eleven in excess of the deaths ; this may be accounted for by the fact that when the husbands and fathers are away sealing the wives and families stop at home and do not travel to the salmon fisheries and hop-fields, as many do in other tribes, where they are exposed to temptations, to immorality and epidemic diseases ; and also to the faithful labours among this people of the Presbyterian missionary, Mr. J. W. Russell.

Health and Sanitary Precautions.—The general health of the tribes has been good during the past year, no epidemic sickness but a slight one of influenza in some of the bands, which carried off a few of the old people and children. The sanitary circular of the department has been explained at meetings of the different tribes, and the missionaries work with the agent in endeavouring to improve their way of living. There are medical officers at Alberni, Ucluelet and Clayoquot who attend all urgent

cases of sickness among the Indians, paying occasional visits to other tribes, and patients come to them from the outlying villages for medical advice.

Resources and Occupations.—While seal-hunting is the principal and most remunerative occupation of these tribes, some of the middle-aged and old men make their living entirely by fishing. Indians from the west coast fish and sell salmon and clams in Victoria and Seattle, W.T. ; and men and women from most of the bands in this agency go to the Fraser river salmon fisheries and are beginning to find work again at the American hop-fields in Washington territory. While travelling the women make a little money by selling cedar mats and mats and baskets of various sizes made with fine grass, dyed various bright colours. At the white settlements at Alberni and along the coast the Indian finds a market for fresh fish. At Kyuquot some of the old men do not leave the reserve but are engaged all summer in salmon and halibut fishing. The salmon can be sold to the Kyuquot trader for salting purposes, and the halibut cut in thin flakes and dried in the sun finds a ready market. At Alberni some of the young men have made good wages supplying the saw-mills with logs and cedar blocks for shingles ; they are also able to hire out some of their horses at the mines for packing and hauling. Deer are plentiful along the coast, and venison is used for food more or less by all the tribes ; elk are also occasionally got. Bear, land otter, marten, mink and coon skins are hunted and trapped for and sold to the traders every year. While on a sealing voyage the carcases of the fur seal are used for food. The hair seal is fairly plentiful, and with the sea-lion in demand for food, the oil being eaten with their dry fish food. Several whales have been harpooned and brought in by the Oiahts and Clayoquots ; the blubber and oil being prized as articles of food. A good many cedar canoes are made every year, but are principally sold to their own or adjacent tribesmen, a few going to the east coast of the island. There is a demand every year for sealing canoes, as they get broken or worn out on the sealing schooners. The old people still make dog-fish oil, but this industry has much decreased of late years.

Buildings.—Some thirty frame cottages have been built during the past year, and improvements made in painting and lining. The young men are very handy with wood-working tools and naturally clever at carpentry, and put up houses, and in many cases finish them tastefully without help from the white man.

Stock.—There is an increase in the number of stock ; the Nitinahts have bought some cows and calves, and the Oiahts several head of young stock, and the Alberni Indians have several more horses. Tom Nahwâik has bought a pair of good plough-horses.

Farming Implements.—Except a plough and two wagons at Alberni, there are no farming implements in the agency, only scythes and gardening tools.

Education.—There are two boarding schools and five day schools in this agency receiving aid from the department. As the Alberni boarding school now receives a per capita grant from the department, the day school grant formerly given to that institution, is withdrawn. The Indians generally show more interest in the education of their children, and I think that the children being thoroughly taught in the two boarding schools, will cause emulation to the other children on the coast.

Boarding Schools.—The Alberni Presbyterian boarding school, formerly opened as an Indian girls' home, now containing more boys than girls, was built six years ago, from plans approved of by the department. It is hard finished throughout, heated by furnace in basement and supplied with water from the river by aid of a windmill ; with all necessary barns and outbuildings, and has been put into a thorough state of repair by Mr. Motion, the principal. The mission occupies sixteen acres of land, the greater part of which is cleared and laid out in orchard and garden, situated on the banks of the Somas river, adjoining Tsahaheh, the Tseshaht, No. 1 reserve. The school is built on a plateau of high ground overlooking the lower fields and the Somas river. The management of this institution is all that can be desired ; the principal being firm and kind in his treatment of the pupils, who are well clothed and fed and

happy in their school life. Steady progress is made in all branches of study under the tution of Mrs. Cameron. And with regard to Christian knowledge, the pupils would compare favourably with our white Sunday school scholars of the same age. I was much pleased to be present at at an entertainment given by the school last March, consisting of songs, choruses, recitations, with tableaux and club-swinging, at which the pupils acquitted themselves admirably.

The Roman Catholic (Bishop Christie) boarding school, Clayoquot, is situated on Meares island, in Deception passage, about two miles by water from the Opitsaht village. It is built on table land, with sandy beach, at the foot of the rising ground, which makes a grand play-ground for the pupils. On my visit to this school last December, I was much struck by the improvement in the manner and appearance of the children, they were all neatly clothed, the girls dressed alike ; the boys in their class-room were orderly and attentive and a good advance made in their studies. In the girls' room the sewing class was in progress, and the younger girls showed me with pride garments made and socks knitted by their own hands. At first there was some little trouble to command ready service, now all are willing to help with work and study their lessons, and their thought seems to be how to please their teachers. After school the scholars all gathered in the upper class-room and sang several school songs, a kindergarten song and another with an accompaniment, the principal playing the organ. The singing was good, intonation of English distinct, some of the pupils having really good voices. The instruments were provided for a brass band and the Rev. Father Maurus was teaching the lads the gamut on each instrument. On my visit to the school in May they were able to play several pieces in a creditable manner. The principal told me that he could get what boys he wanted for the school, but had more difficulty with the girls, the parents parting with them less easily, but that he hoped shortly to have the full complement of pupils in the institution.

Day Schools.—The Ahousaht Presbyterian day school, on the Mahktosis, No. 15 reserve, Matilda creek, Clayoquot sound, is built on rising ground on the northern end of the village. The school-house has been improved by shingling the walls outside and the addition of a turret and bell, the upper floor formerly used as a residence by Mr. Jno. W. Russell, the missionary, is now turned into class-rooms, and Miss McNeil, assistant teacher, takes classes there in succession during school hours. Mr. Russell has the largest average day school attendance ; his teaching is nearly all oral, with help of blackboard, such as writing down a noun, verb and adjective for the pupils to write down a sentence on their slates, bringing in the words ; and practical questions in simple arithmetic. Those who attend at all regularly learn quickly, and the writing of the scholars was very good. On my visit to the school last December sixteen of the pupils were ready for the third standard, having been through the second primer. I visited Ahousaht again in May, but the children were away at the outside village, and only five present when I visited the school.

The Ucluelet Presbyterian day school is situated on the Ittatsoo No. 1 reserve, Ucluelet arm, Barclay sound. The children at this school are well taught by Miss Armstrong. A few of the pupils read very well. Five children from this school have been received into the Alberni boarding school.

The Roman Catholic day school at Opitsat reserve, Clayoquot sound, is regularly taught by the Rev. Chas. Moser; the boarding school has taken many pupils from this school, but there is a small regular attendance. St. Mark's Roman Catholic day school on the Actese reserve at Kyuquot is taught by the Rev. E. Sobry. There is a small attendance at this school, the Kyuquots, with a few exceptions, taking little interest in the education of their children.

The Nitinaht Methodist day school is on the Clo-oose reserve. The Rev. W. Stone was away from his mission travelling in Ontario in the interests of his church, and the school was closed for two quarters. On my visit to Nitinaht in June, I found school re-opened with a better attendance, the pupils bright and attentive and learning rapidly.

The Presbyterian day school for the Oiaht tribe, on No. 1 reserve, Numakamis and No. 8 reserve, Haines island.—Mr. A. McKee teaches at the school-house on Haines island reserve in the summer months, and at Numakamis in the winter, having a good attendance of children when the Indians are at home. This school receives no aid from the department.

Religion.—Regular services are held at the Roman Catholic churches. St. Mark's church, Kyuquot, is attended by the young men and women of the tribe, the chief being a regular church-goer, but the majority of the band do not show much interest in religion. The Rev. Father Sobry also pays occasional visits to the bands at Chaiccleset, Ehattisaht and Noochahtlaht. The Rev. Father Brabant has returned from Europe to resume charge of the missions at Heshquiaht and Nootka ; the Heshquiahts during his absence were regular in keeping Sunday and going to church to say their prayers. This is the only tribe that will not allow liquor on their reserve or Indian doctors to practise. The Rev. C. Moser has charge of St. Anselm's church on the Opitsaht reserve ; Sunday services are attended by the Clayoquot Indians.

The Rev. Doctor Service, Methodist medical missionary, holds services in an Indian house on th Opitsaht Clayoquot reserve ; also attended by Indians.

The Rev. W. Stone, Methodist missionary, has returned to his work among the Nitinahts and holds services in the school-house on the Clo-oose reserve on Sunday and prayer meetings during the week.

The Rev. M. Swartout, Presbyterian missionary, visits the various villages in Barclay sound, preaching to the natives in their own language. Sunday services for the Indians and Sunday school for the children are held in the school-houses at Ahousaht, Ucluelet and Oiaht; well attended by the Indians.

Mr. Motion, principal of the Alberni boarding school, has services for the two tribes at Alberni in their own villages, and services at school for the pupils on alternate Sundays; every other Sunday the children of the school attend the service at the Presbyterian church, some of the adult Indians and former inmates of the school also attending this church.

The classification of the Indians into religious denominations is a very difficult matter, the different religious bodies holding such widely divergent opinions as to what constitutes an Indian a member of their particular church, and Indians where there are two denominations at work, will tell the agent that they attend one church in the morning and the other in the afternoon, and they are both good.

Characteristics and Progress.—These Indians are industrious, and law-abiding. No serious crimes have been committed in the agency, and the different bands are happy and contented communities. The practice of giving feasts and presents to their own or friendly tribes, and the destruction of the personal property of deceased persons, prevent in a great measure the accumulation of property. As a rule these bands are honest and independent, and make a good living, and owing to the efforts of the different missionaries at work among them there is a steady, if slow, improvement in their way of living.

Temperance and Morality.—While I may still report favourably with regard to the sobriety of some of the tribes, there has been some drunkenness, at Ucluelet, Clayoquot and Kyuquot, especially at the time the crews leave for Behring sea, but there is little immorality in any of the west coast bands.

I have, &c.,

HARRY GUILLOD,

Indian Agent.

BRITISH COLUMBIA,
WILLIAMS LAKE AGENCY,
CLINTON, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs.
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Agency.—This agency is situated north and partly west of the Kamloops-Okanagan agency, south of the Babine agency, having the Rocky mountains as a portion of its eastern boundary and the Fraser agency for its western boundary.

This agency contains an aggregate of seventy-seven thousand two hundred and thirteen acres.

Tribe.—These Indians belong chiefly to the Salish and Tinneh peoples. A majority of the young men and women speak the English language fairly well.

Vital Statistics.—The population numbers one thousand nine hundred and seventy-one, consisting of six hundred and ninety-three men, seven hundred and two women and five hundred and seventy-six children, a decrease of two during the year, there having been seventy-eight births and eighty deaths during the year.

ALEXANDRIA BAND.

Reserve.—The reserve of this band is situated on a plateau on both sides of the Fraser river, and about four hundred miles from its mouth. It contains an area of eighteen hundred and forty acres.

Its natural features are open bench lands, good grazing lands, and, when cultivated, all requiring irrigation.

Vital Statistics.—This band has a population of sixty : twenty-two men, twenty women and eighteen children. During the year there were three births and four deaths, a decrese of one since my last report.

Health and Sanitary Precautions.—The health of these Indians has been good, no sickness of a serious nature appearing amongst them. Their houses are comfortable and kept clean.

Resources and Occupations.—The chief occupation of these Indians is farming. They are also good fur-hunters, but this industry is getting less every year. Quite a number find employment as farm-hands with white settlers. The women dress and manufacture deer-skins into gloves and moccasins, which are sold or used on the reservation, and they also put up and sell quantities of berries of different kinds.

Buildings, Stock and Farming Implements.—They have a number of dwellings and horse stables made of hewn timber and mostly all shingled. They have good horses, a few cattle and pigs, and a good supply of farming implements.

Education.—Only a few children from this reserve have received any education ; these have attended the Williams Lake industrial school.

Religion.—These Indians are devout Roman Catholics. They have a neat church on the reserve, and take a great deal of interest in religious matters.

Characteristics and Progress.—These Indians are industrious and law-abiding, making a slow but steady advance in cultivating their reserve.

Temperance and Morality.—These people are moral, and with one or two exceptions are temperate.

Alkali Lake Band.

Reserve.—The reserve of this band is situated on a level bench a few miles east of the Fraser river, and about three hundred and twenty miles from its mouth. It contains six thousand five hundred and sixty-seven acres. A large portion of this reserve is fit for cultivation, but water for irrigation is not available, and in consequence quite a large portion is used for pasturage. There are also some very fine hay meadows on this reserve, from which large quantities of hay are cut every year.

The natural features are bench lands requiring irrigation, excellent hay meadows and fair timber on the mountain slopes.

Vital Statistics.—The population of this band consists of forty-nine men, fifty-eight women and fifty-one children, making a total of one hundred and fifty-eight, a decrease of fourteen since my last report. There were sixteen deaths and only two births.

Health and Sanitary Precautions.—There was an epidemic of grippe amongst the members of this band, which, in a great many cases, proved fatal. Their premises are kept clean, and vaccination is attended to by me.

Resources and Occupations.—These Indians are good farmers ; they raise quite a quantity of grain and vegetables. Quite a number of the men are employed as farm-hands with white settlers, and the women earn money by the sale of gloves, moccasins and other articles that they manufacture from the tanned deer-skins. They also gather large quantities of berries, which are preserved for winter use or sold to their white neighbours.

Buildings, Stock and Farming Implements.—They have good dwellings, mostly of hewn timber and shingled, good horse stables, have good horses and some cattle, and are well supplied with farming implements, wagons and sleighs.

Education.—Quite a number of children from this band attend the Williams Lake industrial school.

Religion.—These Indians are strict Roman Catholics. They have a neat church on the reserve, finished in modern style, at which they attend both morning and evening. A missionary makes occasional visits amongst them.

Characteristics and Progress.—They are good workers and law-abiding, and are becoming much better off. The greater portion of this reserve is under fence.

Temperance and Morality.—They are a moral and temperate people.

Anaham Band.

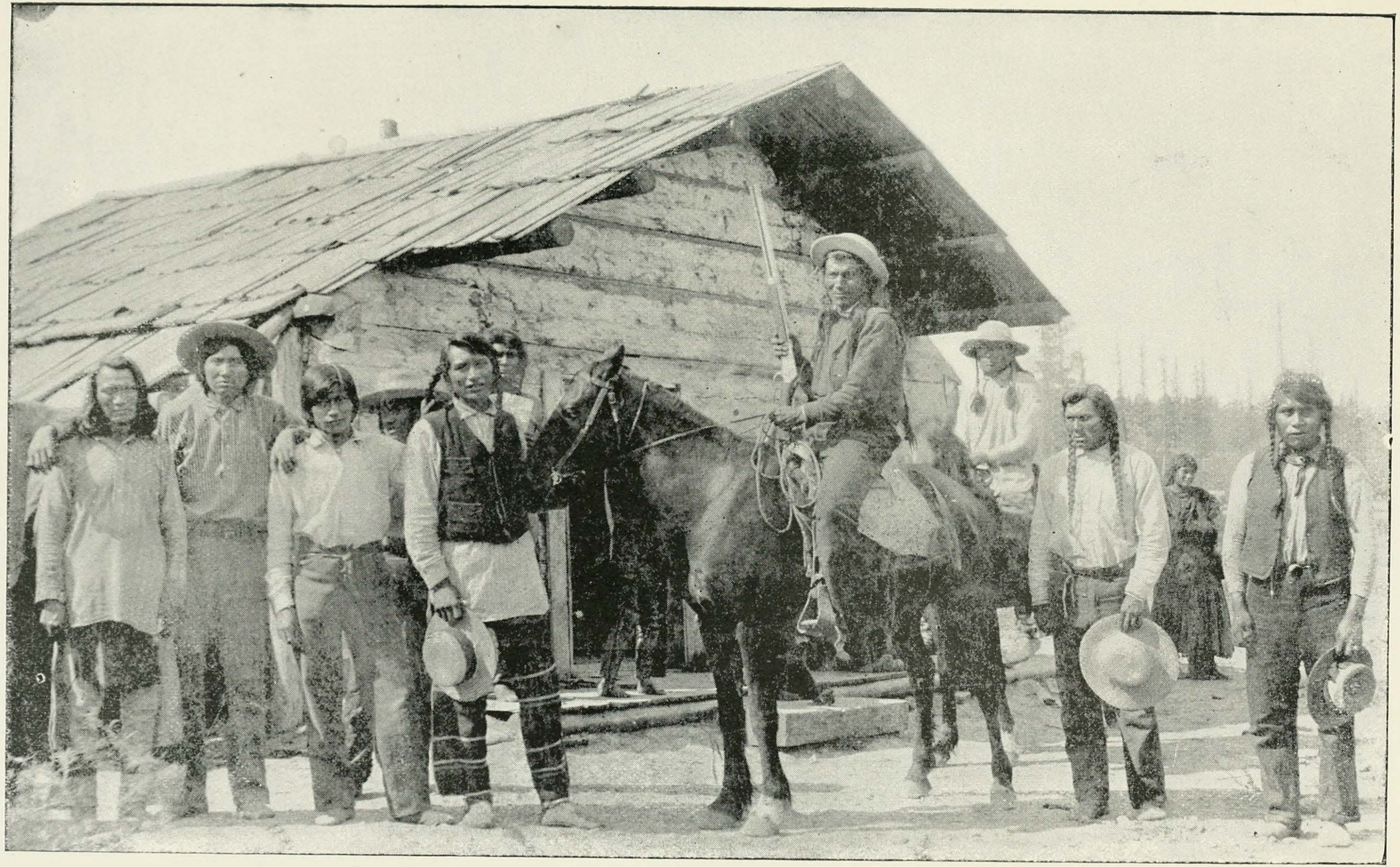
Reserve.—The reserve of these Indians is situated in a beautiful valley in close proximity to the Chilcoten river, and about sixty miles from its mouth. It has an area of nine thousand five hundred and seventy acres.

The natural features are open bench lands requiring irrigation, water for which is in abundance, good grazing lands and fair timber on the mountain slopes.

Vital Statistics.—The population of this band consists of seventy-nine men, seventy-four women, and sixty-three children, making a total of two hundred and sixteen. During the year there were ten births and four deaths, making an increase of six since my last report.

Health and Sanitary Precautions.—The health of this band has been good ; with the exception of a few cases of grippe, there was no sickness of a serious nature amongst them.

Resources and Occupations.—These Indians do considerable farming and stock-raising, having one of the best reserves in this agency. They have excellent hay meadows. Quite a number of men find employment as farm-hands, drovers for stock-raisers, while quite a number are employed as freighters, using their own wagons and horses.



A Group of St. Mary's Indians (Kootenays), B.C.

Buildings, Stock and Farming Implements.—They have fairly good dwellings, good horse stables, and plenty of horses and cattle. They are well supplied with farming implements of all kinds, and also wagons and sleighs.

Education.—None of the children of this band have received any education, there being no schools within seventy-five miles of the reserve.

Religion.—These Indians are all Roman Catholics. They have a small church on the reserve and are frequently visited by missionaries.

Characteristics and Progress.—They are very industrious and hard-working, becoming better off and paying more attention to the cultivation of their lands than formerly. During the year they erected five new dwellings and two horse stables.

Temperance and Morality.—On the whole they are a moral and temperate people.

Anderson Lake Band.

Reserve.—This reserve is situated at the upper end of Anderson lake, being the most southern portion of this agency. It has an area of four hundred and eighty-four acres.

The natural features are bottom lands and good hay meadows, surrounded by good grazing lands and timber of excellent quality.

Vital Statistics.—The population consists of twenty-four men, twenty-four women and seventeen children, making a total of sixty-five. During the year there was one birth and one death.

Health and Sanitary Precautions.—The health of these Indians has been good. Premises are kept clean and in a sanitary condition. All of these Indians have been vaccinated by me from time to time.

Resources and Occupations.—These Indians do a little farming, have good vegetables and fruit gardens. Some of the men are employed as farm-hands, some go to the coast during the salmon-canning season, some are employed in gold-mining, and others in cutting saw-logs on Crown lands which they raft across the lakes where they are disposed of to the saw-mills.

Buildings, Stock and Farming Implements.—They have good dwellings, good horse stables, quite a number of horses, a few pigs, and a good supply of farming implements.

Education.—None of the children of this band have ever received any education.

Religion.—These Indians are all Roman Catholics. They have a small church on the reserve and are frequently visited by a missionary. They take a great deal of interest in religion.

Characteristics and Progress.—They are good workers, law-abiding, and earn a comfortable living.

Temperance and Morality.—They are a moral and temperate people, and it is a rare thing to hear of any of them using an intoxicant.

Bridge River Band.

Reserves.—The reserves laid out for this band are along the left banks of the Fraser and Bridge rivers. The lands fit for cultivation are in small patches, but the Indians manage to raise good crops of grain and vegetables. There are six thousand five hundred and ninety acres reserved for this band.

The natural features are bench lands following the rivers, all requiring irrigation, and good grazing along the mountain slopes.

Vital Statistics.—The population consists of thirty-six men, thirty-six women, and thirty-three children, making a total of one hundred and five. During the year there were five births and two deaths.

Health and Sanitary Precautions.—No sickness of a serious nature visited these Indians during the year. Dwellings are kept in a good sanitary condition, and vaccination is attended to by me.

Resources and Occupations.—These Indians are very industrious, raising fair crops of grain and vegetables. Their occupations are various : working as farm-hands with white settlers, freighting, using their own horses and wagons, gold-mining, packing over trails to the Bridge river gold mines, acting as guides to tourists and hunters. The women earn a good deal of money from the sale of gloves, moccasins and other articles that they manufacture from the tanned deer-skins, and they also sell and preserve for winter use quantities of berries, which are very plentiful near the reservation.

Buildings, Stock and Farming Implements.—They have comfortable dwellings and good horse stables, good horses, a few cattle, and are well supplied with farming implements, wagons and sleighs.

Religion.—They all belong to the Roman Catholic Church and have a small church on the reserve.

Education.—None of the children of this band have ever received the benefits of education.

Characteristics and Progress.—These Indians are industrious and law-abiding, and are making steady progress.

Temperance and Morality.—They are a temperate and moral people.

Canoe Creek Band.

Reserve.—The reserve of this band is situated on a small stream called Canoe creek, which empties into the Fraser river, about three hundred miles from its mouth. These Indians have good lands, but owing to the scarcity of water for irrigation only a very small portion is cultivated. They have ten thousand five hundred and eighty-nine acres reserved for them.

The natural features are open bench lands and good grazing lands, and fair timber on the mountain slopes.

Vital Statistics.—The population consists of fifty-two men, sixty-two women and forty children, making a total of one hundred and fifty-four. During the year there were two births and five deaths.

Health and Sanitary Precautions.—The general health of these Indians has been good. Their houses are kept clean, and the Indians are regularly vaccinated.

Resources and Occupations.—These Indians engage in farming and work as farm hands for white settlers, and as cowboys with stock-raisers.

Buldings, Stock and Farming Implements.—They have fair dwellings, good horse-stables, a great number of horses and some cattle, and a good supply of farm implements, wagons and sleighs.

Education.—A number of children from this band are being educated at the Williams Lake industrial school.

Religion.—These Indians are all Roman Catholics, and have just completed a magnificent church, which, they tell me, cost them $4,000.

Characteristics and Progress.—They are industrious, law-abiding and honest.

Temperance and Morality.—With one or two exceptions, they are moral and temperate.

Cayoosh Creek Band No. 1.

Reserve.—This reserve is situated at the mouth of Cayoosh creek where it joins the Fraser river, about two hundred and twenty-miles from its mouth. It contains three hundred and ninety acres.

The natural features are : bench lands, following the river, and good grazing lands along the mountain sides.

Vital Statistics.—The population consists of eleven men, thirteen women and ten children, making a total of thirty-four. During the year there were two births and no deaths.

Health and Sanitary Precautions.—The health of these Indians has been good ; no serious sickness amongst them. Vaccination was attended to and all sanitary precautions taken.

Resources and Occupations.—Farming, working as labourers, hunting, fishing and gold-mining are the principal occupations.

Buildings, Stock and Farming Implements.—These Indians have fairly comfortable homes and good stables. They have a few horses, wagons and sleighs and sufficient farming implements for their wants.

Education.—None of the children of this band have received any education.

Religion.—These Indians are all Roman Catholics, and have a small church on the reserve.

Characteristics and Progress.—They are industrious and law-abiding.

Temperance and Morality.—They are a temperate and moral people.

Cayoosh Creek Band No. 2.

Reserve.—This reserve is situated four miles from Cayoosh creek No. 1 band, on a bench above the Fraser river, and contains six hundred acres. The natural features are open bench lands requiring irrigation ; on the mountain slopes good grazing lands and fair timber.

Vital Statistics.—The population consists of five men, four women and six children, making a total of fifteen. During the year there were no births and one death.

Health and Sanitary Precautions.—The health of these Indians has been good ; the one death occurring being from old age. Their houses are kept clean and comfortable.

Resources and Occupations.—Farming, fishing, hunting and gold-mining are the principal occupations of these Indians, while the women contribute by the sale of gloves, moccasins and berries.

Buildings, Stock and Farming Implements.—They have comfortable houses, a few horses and cattle, wagons, sleighs and a fair supply of farming implements.

Education.—No children from this band have ever attended school.

Religion.—These Indians belong to the Anglican Church. They have no church on the reserve but attend worship at Lillooet, a distance of six miles from the reservation.

Temperance and Morality.—They are a temperate and moral people.

Clinton Band.

Reserve.—This reserve is situated in the Clinton valley, and contains ten hundred and seventy-three acres.

The natural features are small flats and meadow lands along the banks of a small stream running through the reserve, and timbered mountain slopes afford good grazing.

Vital Statistics.—The population consists of fifteen men, sixteen women and thirteen children, making a total of forty-four. There were four births and three deaths during the year.

Health.—There was no sickness of a serious nature amongst these Indians, the deaths being those of infant children.

Resources and Occupations.—They raise some grain and vegetables, also quite a quantity of hay, work as labourers at various occupations, are good hunters, and during the winter season cut and sell large quantities of fire-wood in the village of Clinton. The women earn a good deal of money selling berries and making gloves and moccasins ; they are also employed by white families as washerwomen.

Buildings, Stock and Farming Implements.—These Indians have very fair buildings, good horses, a good supply of farming implements, and also wagons and sleighs.

Education.—None of the children of this band attend any school.

Religion.—These Indians are all Roman Catholics. They have a neat church on the reserve, where daily service is held. A missionary makes regular trips amongst them.

Characteristics and Progress.—They are industrious, law-abiding and honest, and earn a comfortable living.

Temperance and Morality.—They are a temperate and moral people. Occasionally an Indian from some other reservation or a white man goes on their reserve drunk, and I am at once notified of it and the offence dealt with.

Fountain Band.

Reserve.—This reserve is situated in terraces on the east bank of the Fraser river, and two hundred and fifty miles from its mouth. It contains an area of one thousand seven hundred acres.

The natural features are open bench lands, requiring irrigation ; good grazing lands on the hills and mountain sides.

Vital Statistics.—This band has a population of sixty-nine men, seventy-six women and fifty-seven children, making a total of two hundred and two. During the year there were nine births and four deaths.

Health and Sanitary Precautions.—With the exception of the usual colds and a few cases of grippe, this band was free from sickness during the year. Sanitary regulations were attended to and all vaccinated who had not been successfully vaccinated before.

Resources and Occupations.—The chief occupation is farming. Some are engaged as gold-miners, farm-hands, and teamsters.

Buildings, Stock and Farming Implements.—These Indians have fairly good dwellings, good horse-stables, good horses and a few cattle ; wagons and sleighs, and are well supplied with farming implements.

Education.—None of the children of this band have received any education.

Religion.—These Indians are all Roman Catholics. They have a fine church on the reserve, and a well trained brass band.

Characteristics and Progress.—They are very intelligent, industrious and law-abiding and are making good progress in cultivating and fencing their lands.

Temperance and Morality.—On the whole they are temperate and moral.

Dog Creek Band.

Reserve.—This reserve is situated on a stream of that name, and contains an area of thirteen hundred and seventy-one acres. Its natural features consist of open bench lands requiring irrigation, and good grazing lands on the hills and mountain sides.

Vital Statistics.—The population consists of five men, six women and four children, making a total of fifteen. During the year there were two births and one death.

Health and Sanitary Precautions.—There was no sickness of a serious nature amongst these people. Sanitary regulations are well observed, and vaccination attended to.

Resources and Occupations.—These Indians find employment in farming, working as labourers with white farmers, acting as cowboys for stock-raisers ; hunting and fishing are the chief occupations.

Buildings, Stock and Farming Implements.—They have fair dwellings, and horse stables, a few good horses and cattle, and a good supply of farming implements.

Education.—A few children from this band attend the Williams Lake industrial school.

Religion.—They are all Roman Catholics, but have no church on the reserve.

Characteristics and Progress.—They are industrious workers, law-abiding and honest, and are making good progress in fencing and cultivating their lands.

Temperance and Morality.—They are moral and temperate.

High Bar Band.

Reserve.—This reserve is situated on the east bank of the Fraser river about three hundred miles from its mouth, and contains two thousand nine hundred and twenty-four acres.

The natural features are open bench lands requiring irrigation; owing to the scarcity of water for this purpose, the land cultivated is very limited. There are good grazing lands on the reserve and in the vicinity.

Vital Statistics.—The population consists of eighteen men, fifteen women and seventeen children, making a total of fifty. During the year there were four deaths and one birth.

Health and Sanitary Precautions.—The health of the Indians has been good and their dwellings have been kept clean.

Resources and Occupations.—They farm on a small scale, have good vegetable gardens, and raise quite a quantity of small fruit, such as currants and raspberries. They hunt, fish, work as labourers with white settlers, and guides to hunters and tourists.

Buildings, Stock and Farming Implements.—These people have fair dwellings and horse-stables, a few good horses, some cattle, and sufficient farming implements for all their requirements.

Religion.—They all belong to the Roman Catholic Church. They have a small church on the reserve, and pay strict attention to religious matters.

Education.—None of the children have received any education.

Characteristics and Progress.—These Indians are industrious and law-abiding. The scarcity of water for irrigating their lands prevents them from making much progress on their reserves.

Temperance and Morality.—They are a temperate and moral people.

Kenim Lake Band.

Reserve.—This reserve is situated in the Bridge Creek valley, twenty miles to the east of the Cariboo wagon road, and contains four thousand five hundred and six acres. The natural features consist of bench lands and meadow lands along the river bottoms, good grazing lands, and the rest of the reserve is covered with excellent timber.

Vital Statistics.—The population consists of thirty-three men, thirty women and twenty-nine children, making a total of ninety-two. During the year there were five births and four deaths.

Health and Sanitary Condition.—The health of these people has been good ; no contagious or infectious diseases visited them.

Buildings, Stock and Farming Implements.—They have good dwelling-houses and horse stables, good horses and quite a number of cattle, and are well supplied with farming implements and machinery.

Religion.—They are all Roman Catholics, and have one of the finest churches in this agency. They take great interest in religion.

Education.—Quite a number of children from this band attend the Williams Lake industrial school.

Characteristics and Progress.—They are hard workers, law-abiding, and are making steady progress on their reservation.

Resources and Occupations. Farming, stock-raising, trapping, hunting and fishing are the principal pursuits.

Temperance and Morality.—These Indians are a temperate and moral people.

Lillooet Band No. 1.

Reserve.—A portion of this reserve is situated on the west side of Fraser river, near the village of Lillooet, and the remainder six miles below, on the east side of Fraser river. The reserve contains nine hundred and forty acres.

Its natural features are bench lands, a good portion of which is suitable for cultivation, but water for irrigation cannot be obtained. There is good grazing and some fair timber.

Vital Statistics.—The population consists of twenty-nine men, twenty-seven women and eighteen children. During the year there were two births and two deaths.

Health and Sanitary Precautions.—With the exception of grippe, there were no serious cases of sickness amongst these Indians. Their houses are clean and comfortable, and they make great efforts to attend to sanitary regulations.

Resources and Occupations.—These Indians find employment in farming, gold-mining, hunting, fishing, working as labourers at various occupations, freighting, owning their own teams and wagons. Quite a number are employed cutting and supplying fire-wood for the village of Lillooet, and experienced guides earn many hundreds of dollars accompanying hunters in search of large game in the mountains. Their women also contribute a good deal by the sale of gloves, moccasins and berries.

Buildings, Stock and Farming Implements. They have good buildings, good horses, and a few head of cattle. They are well supplied with farming implements, wagons, sleighs, harness and saddles.

Education.—A few of the children of this band have attended the public school at Lillooet.

Religion.—They are all Roman Catholics, and have a neat church on the reserve, and a regular service, a missionary being now stationed amongst them.

Characteristics and Progress.—They are very industrious and law-abiding. During the year they erected one new dwelling and cleared off a few acres of new land. The majority of them earn a comfortable living.

Temperance and Morality.—They are, on the whole, a temperate and moral people, but many temptations are put in their way by the lower class of whites and half-breeds, and the Chinese are also a nuisance in this respect, giving the provincial police a great deal of trouble, as they are the most difficult class to convict.

Lillooet Band No. 2.

Reserve.—This reserve is situated on the west bank of the Fraser river, and about twelve miles from the village of Lillooet. It contains six hundred and forty acres.

Its natural features are open bench lands suitable for cultivation, all requiring irrigation, and fair timber.

Vital Statistics.—The population consists of two men, one woman and one child. There were no births or deaths during the year.

Health and Sanitary Precautions.—The health of these people has been good; houses and surroundings are in good order.

Resources and Occupations.—Farming, gold-mining, fishing and hunting are the chief occupations of this small band.

Buildings, Stock and Farming Implements.—The houses are fairly good. The Indians have a few horses and a fair supply of farming implements.

Religion.—These Indians belong to the Anglican Church; they have no place of worship on the reserve, but occasionally attend church at Lillooet.

Characteristics and Progress.—They are industrious and law-abiding, and earn a comfortable living.

Temperance and Morality.—They are temperate and moral.

Pavilion Band.

Reserve.—The reserve of this band is situated on the east and west sides of the Fraser river, and contains an area of four thousand four hundred and fifty acres.

Its natural features are open bench lands, all requiring irrigation, good grazing and fair timber lands.

Vital Statistics.—The population consists of twenty-four men, twenty-eight women, and sixteen children, making a total of sixty-eight. During the year there were no births or deaths.

Health and Sanitary Precautions.—The health of this band has been good. Sanitary regulations are observed and vaccination is attended to by me.

Resources and Occupations.—Farming, working with white settlers, hunting, fishing, and gold-mining are the principal occupations of these Indians.

Buildings, Stock and Farming Implements.—During the year they have added one new dwelling-house. They have good horses, wagons, sleighs, a few head of cattle and pigs, and a good supply of farming implements.

Education.—None of the children of this band have ever received any education.

Religion.—These Indians are all Roman Catholics. They have a small church on the reserve, and take great interest in religion.

Characteristics and Progress.—They are good workers, law-abiding and are steadily improving their reserve.

Temperance and Morality.—They are temperate and moral.

Quesnel Band.

Reserve.—This reserve is situated on the east bank of the Fraser river and four hundred and fifty miles from its mouth and three miles from Quesnel village. It has an area of one thousand six hundred and sixty-eight acres. Its natural features consist of flats along the Fraser river covered with brush and on the upper benches covered with heavy timber.

Vital Statistics.—The population consists of twenty-seven men, twenty-two women and eighteen children, making a total of sixty-seven. During the year there were ten births and fifteen deaths.

Health and Sanitary Precautions.—In January of this year there was an outbreak of small-pox at this reservation, and when discovered three cases had developed. These were at once isolated and the whole of the reservation quarantined. Fortunately the disease did not spread ; only one new case occurred after the three first cases were isolated. The patients all recovered, and after forty-six days of quarantine the doctor in charge pronounced a clean bill of health. The majority of deaths are those of infants.

Resources and Occupations.—The chief occupations of these Indians are farming, acting as boatmen, hunting, fishing, trapping, and farm-hands with white settlers.

Buildings, Stock and Farming Implements.—Their buildings are fairly good, with the exception of their horse stables, which are poor. They have a number of horses and sleighs and fair supply of farming implements and one wagon.

Education.—None of the children have ever received any education.

Religion.—These Indians are all Roman Catholics. They have a small church on the reserve and take a great interest in religion.

Characteristics and Progress.—They are law-abiding, and are making better progress in cultivating their lands than heretofore.

Temperance and Morality.—As a rule they are temperate and moral.

Seton Lake or Mission Band No. 1.

Reserve.—This reserve is situated on the west side of Seton lake and contains an area of ten hundred and eighty-five acres. Its natural features consist of open bench lands requiring irrigation, timbered mountain slopes and poor grazing lands.

Vital Statistics.—The population consists of twenty-seven men, nineteen women, and twenty-five children, making a total of seventy-one. During the year there were three births and one death.

Health and Sanitary Precautions.—The health of these Indians has been good. The houses and their surroundings were kept in good order, and vaccination has been attended to by me.

Resources and Occupations.—These Indians engage in farming and gardening on a small scale, packing with horses from the reserve to the Bridge river gold mines, as labourers at various occupations, hunting, fishing, and gold-mining.

Buildings, Stock and Farming Implements.—Their buildings are fairly good, mostly of hewn timber. They have a number of horses, a few head of cattle and pigs, and farming implements sufficient for their needs.

Education.—None of the children from this band have received any education.

Religion.—These Indians are all Roman Catholics and have a small church on the reserve.

Characteristics and Progress.—They are industrious and law-abiding. They are not making much progress ; they are unable to cultivate much land owing to the scarcity of water for irrigation.

Temperance and Morality.—They are temperate and moral.

Seton Lake or Enias Band No. 2.

This reserve is situated on the west side of Seton lake and about six miles from its outlet and has an area of one hundred and sixty-six acres. Its natural features are bench lands requiring irrigation, timbered mountain slopes and no grazing lands.

There is only one man and one woman residing on this reserve. They make a living by hunting, fishing and gardening.

Seton Lake or Slosh Band No. 5.

Reserve.—This reserve is situated at the head of Seton lake, and contains ten hundred and eighty acres. Its natural features consist of bench and bottom lands, all requiring irrigation, and surrounded by high mountains heavily timbered.

Vital Statistics.—The population consists of twelve men, twelve women, and ten children, making a total of thirty-four. During the year there were no births or deaths.

Health.—The health of these Indians has been good ; no sickness of a serious nature appeared amongst them.

Resources and Occupations.—These Indians engage in farming, hunting, fishing and packing with horses to the Bridge river mines. A few years ago these Indians earned a great deal of money boating across Seton lake in canoes ; that occupation is now gone, as there are two steamers on the lake owned by white men.

Buildings, Stock and Farming Implements.—They have a fair class of buildings, good horses, a few head of cattle and pigs, wagons, sleighs, harness, saddles and a good supply of farming implements.

Education.—No children from this band have received any education.

Religion.—They are all Roman Catholics. They have a small church on the reserve, where daily service is held.

Characteristics and Progress.—They are hard-working, most of their land has to be cleared of brush, and they are constantly improving it.

Temperance and Morality.—They are a temperate and moral people.

Seton Lake or Necait Band No. 6.

Reserve.—This reserve is situated at the foot of Anderson lake, and contains eighty-four acres. Its natural features consist of bench and bottom lands surrounded by high mountains heavily timbered ; there are no grazing lands.

Vital Statistics.—The population consists of twenty men, seventeen women and sixteen children, making a total of fifty-three. During the year there were four births and no deaths.

Health.—The health of this band has been good.

Resources and Occupations.—These Indians engage in farming, gardening, freighting in boats and canoes across Anderson lake, hunting, fishing, trapping and as labourers at various occupations.

Buildings, Stock and Farming Implements.—They have good dwellings and horse-stables, a few good horses and sleighs, and a fair supply of farming tools.

Characteristics and Progress.—They are law-abiding and industrious. Their reserve being so small it is difficult to make much progress on it.

Education.—None of the children of this band have ever received any education.

Religion.—These Indians belong to the Roman Catholic Church. A missionary visits them regularly, when services are held in a small church on the reserve.

Temperance and Morality.—They are temperate and moral.

Soda Creek Band.

Reserve.—A portion of this reserve is situated on the east side of the Fraser river, and the remainder along the Cariboo wagon road, about fourteen miles south of the former. The reserve has an area of three thousand and five acres. Its natural features are : in the portion along the Fraser river, bench lands ; while that along the Cariboo wagon road is meadow land ; good grazing at both places and fairly good timber.

Vital Statistics.—The population consists of twenty-six men, thirty-two women, and twenty-two children, making a total of eighty. During the year there were two births and six deaths.

Health and Sanitary Precautions.—Most of the deaths at this reserve were from consumption of long standing. Otherwise the health of the Indians was good. Their houses are kept clean, and vaccination is attended to.

Resources and Occupations.—The principal occupations are farming, and teaming their products to the gold mines, working as farm-hands for white settlers, hunting, fishing and trapping. The women manufacture and sell moccasins and gloves from tanned deer-skins.

Buildings, Stock and Farming Implements.—These Indians have very fair dwellings and good horse-stables, a few good horses, wagons, sleighs, harness, saddles, and a good supply of farming implements.

Characteristics and Progress.—They are very industrious and made great improvements on the reserve during the year by building a new house, breaking up new land, and constructing a large ditch for irrigating purposes.

Education.—A few of the children belonging to this band attend the Williams Lake industrial school.

Religion.—These Indians are all Roman Catholics and have a very neat church on the reserve, where a missionary visits them regularly. They take a great interest in religion.

Temperance and Morality.—They are a temperate and moral people.

Stone Band.

Reserve.—The reserve of this band is situated on the west bank of the Chilcoten river and contains an area of four thousand eight hundred and ninety acres. Its natural features are bench lands requiring irrigation, good grazing lands and good hay meadows.

Vital Statistics.—The population consists of thirty-six men, thirty-seven women, and thirty-three children, making a total of one hundred and six. During the year there were three births and two deaths.

Health and Sanitary Precautions.—These people had very little sickness amongst them and this not of a serious nature. They keep their houses and surroundings in a good sanitary condition.

Resources and Occupations.—These Indians engage in farming, hunting, fishing, trapping, work as labourers, as farm-hands for white settlers, and many are employed as cowboys with stock-raisers.

Buildings, Stock and Farming Implements.—They have good houses, good horses, sleighs, harness, saddles and a fair supply of farming implements.

Education.—None of the children of this band have ever received any education.

Religion.—They are all Roman Catholics, and have a small church on the reserve.

Characteristics and Progress.—These people are industrious, but until lately took more interest in hunting and fishing than in cultivating their lands ; now they are getting ready to cultivate a good portion, and have expended time and labour in constructing a large ditch by which they can bring a good supply of water for irrigation purposes on to the reserve. They have also constructed good dwellings and stables this year.

Temperance and Morality.—They are a temperate and moral people.

Toosey Band.

Reserve.—This reserve is situated on Riskie creek, a small stream that flows into the Chilcoten river. This reserve has an area of six thousand three hundred and thirty-four acres. Its natural features are open prairie lands requiring irrigation ; hay meadows, and excellent grazing lands.

Vital Statistics.—The population consists of twenty men, seventeen women and twenty-two children, making a total of fifty-nine. During the year there were four births and no deaths.

Health.—The health of these people has been good ; there was no sickness amongst them.

Resources and Occupations.—These Indians engage in farming, hunting, fishing, trapping, as labourers, as farm-hands with white settlers, and as cowboys with cattle men.

Buildings, Stock and Farming Implements.—These Indians have very fair buildings. They have horses, wagons, sleighs, cattle, harness, saddles and good farming implements.

Education.—No children from this band have received any education.

Religion.—These Indians are all Roman Catholics.

Characteristics and Progress.—They are industrious and law-abiding, and making good progress on the reserve. They removed all their buildings from where they were formerly situated to a more convenient place on the reserve, and added a few comfortable dwellings.

Temperance and Morality.—They are temperate and moral.

Williams Lake Band.

Reserve.—This reserve is situated in the Williams lake valley, and contains an area of four thousand six hundred and five acres. Its natural features consist of good bottom lands, excellent hay meadows, surrounded by good grazing lands.

Vital Statistics.—The population consists of fifty-one men, fifty-five women and thirty-seven children, making a total of one hundred and forty-three. During the year there were four births and five deaths.

Health and Sanitary Precautions.—There was a great deal of sickness, such as grippe and pneumonia at this place. The houses are kept clean, and all the Indians have been vaccinated by me.

Resources and Occupations.—These Indians engage in farming, hauling their products to market, working as labourers at various occupations, hunting, fishing and trapping.

Buildings, Stock and Farming Implements.—They have good buildings, horses, cattle, pigs, wagons, sleighs, harness, saddles, and are well supplied with farming implements.

Education.—Quite a number of children from this band attend the Williams Lake industrial school.

Religion.—These Indians are all Roman Catholics, and have a very neat church on the reservation.

Characteristics and Progress.—They are an industrious and law-abiding people, and are making good progress on their reserve.

Temperance and Morality.—As a rule they are temperate and moral.

General Remarks.

The Indians of this agency are on the whole steadily improving, particularly in the cultivation of their lands and the attention paid to their homes, which are much better furnished than formerly, and kept cleaner and more home-like. Good cooking and heating-stoves are noticeable in nearly all their houses.

The industrial school at Williams Lake, where fifty pupils are taught, is doing good work, and has no difficulty in keeping up the standard. The pupils have made good progress in their trades and studies.

Too much praise cannot be given the Rev. principal, the matron, and teachers in charge of this school, for the care and attention they give the pupils, at times under very trying circumstances.

I have, &c.,

E. BELL,

Indian Agent.

BRITISH COLUMBIA,
INDIAN SUPERINTENDENT'S OFFICE,
VICTORIA, October 5, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report upon Indian affairs in the province of British Columbia, for the year ended June 30, 1901.

The reports and statistical statements of the several agents, as also the reports of the respective industrial and boarding schools, as far as received, have been transmitted to the department as soon as possible after their receipt ; and the information conveyed in these returns under their several heads is of such a detailed nature that it only remains for me to make such general comments as appear to require special mention.

Vital Statistics.—A comparison made of the population of the several agencies, from which statistics have so far been received, with the figures for the same agencies for the previous fiscal year shows that a decrease, though inconsiderable, has occurred. However, the statistical statements due from some of the agents may on the other hand more than offset this decrease.

Health and Sanitary Precautions.—The Indian population of British Columbia has enjoyed fair health during the period covered by this report, and were it not for the two unfortunate outbreaks of small-pox that occurred, the one at Quesnel, in the northern portion of the Williams Lake agency, and the other on the Nass and Skeena rivers, in the Northwest Coast agency, little sickness, other than that incidental to their untutored condition, overtook the Indians. As a result of the prompt and energetic measures taken by the department, the small-pox cases were isolated and kept under strict surveillance, and all suspects were quarantined, so that at the expiration of the time prescribed by the medical practitioners in charge, both the sick and the suspects were permitted their liberty as before, all the usual sanitary precautionary measures to prevent the spread of the contagion having been previously taken. What a general small-pox outbreak in the Northwest Coast agency would result in to the department and the province at large, may be inferred when it is stated that at the time of the outbreak on the Nass and Skeena rivers there were between three and four thousand people congregated there, the majority of whom were Indians. So well were the cases treated, both at the Quesnel reserve and on the Northwest Coast, that at the former place no deaths occurred ; and at the latter only one succumbed, that being a child of anything but a vigorous constitution. While on this subject, it seems only fitting to the occasion to state that much praise is due to the Venerable Archdeacon Collison, the Rev. J. B. McCullough, Dr. Joseph Gibbs, as well as to the medical

men working in conjunction with him, namely, Drs. Bolton, Wrinch and Ardagh, for the assiduity with which they laboured to care for the afflicted and to stamp out every vestige of the loathsome disease. In the Kootenay agency also small-pox made its appearance, but it is a pleasure to state that the disease did not spread beyond a few white people who evidently had come in contact with the sickness which appears to have been quite prevalent at several points in the western United States, in close proximity to the international boundary line. Grippe and measles, two diseases which hitherto have made such inroads into the Indian population, seem to have almost wholly disappeared. Consumption and scrofula are the two inherent tendencies in the Indian constitution that make up the major portion of his ailments, either direct or indirect, and when coupled with unnecessary exposure, both on the part of the parents and the children, which is so often the case, the combination is one not tending to the physical well-being of the aborigines.

With the advent of civilization the Indian is gradually abandoning his time-honoured, airy, large, one-roomed, barn-like abode, with its glowing fire placed in the centre for the comfort and cheer of the several occupants of the structure, in favour of the small cottage closely constructed of rustic. This is often over-heated in inclement weather and sometimes so stifling as a result of the exhaustion of the life-giving principles of the air as to become most unhealthful to the inmates. It is a difficult matter to impress upon the aboriginal mind the importance of a continuous supply of fresh air. The Indian rather regards fresh air as something intangible, and therefore an entity that may be set aside at pleasure with impunity. He may be scrupulous as to the use of pure water for drinking purposes, and will often refuse certain food products that do not parallel his standard of right living, but the matter of the air he breathes does not seem to cost him a thought. In this respect it may be mentioned that good work is being done by the missionaries of the various denominations working amongst the Indians, and by the department's agents in endeavouring to inculcate into the minds of the Indians a proper regard for the observance of all sanitary precautions so far as known to science. The agents have from time to time been requested to take special pains to explain to their charges the department's instructions issued at periodical intervals regarding questions of sanitation ; and it is hoped that the near future will witness an improvement in the direction of an intelligible appreciation of the benefits accruing from a correct understanding of the laws of nature, particularly in relation to the causes and amelioration of the conditions which make consumption possible. Vaccination is practised both by the Indian agents and medical men, and nearly every one of the Indians of the several agencies has at some time been operated upon ; and re-vaccination is resorted to wherever it is thought advisable to perform the operation. The Indian hospitals at Port Simpson and Lytton continue to render invaluable service to the bands residing and sojourning in their respective localities ; and the grants made to these institutions by the department very materially aid in their proper management. Full advantage is taken of the establishment of these hospitals by the Indians requiring such treatment ; and many cases are recorded where life has been saved by resort being made thereto. The Indian hospital at Metlakahtla has been closed during the fiscal year owing in a measure, it is said, to the inability to secure the services of a medical practitioner therefor. It is hoped, however, that this difficulty will soon be overcome.

Buildings, Stock and Farm Implements.—The efflux of time witnesses the gradual abandonment of the old so-called Indian rancherie habitation for the more pretentious symbol of civilization—the cottage, which may now be seen in more or less numbers on most of the reserves, according as the inhabitants thereof have evinced a desire to imitate their white neighbours in their mode of living. In some portions of the North-west Coast agency whole villages are composed of dwellings of the cottage type ; and such houses are usually fairly well supplied with the conveniences, and even some of the comforts of civilized life. Sewing-machines, cooking-stoves, beds, and tables, liberally furnished with equipment similar to that of their white neighbours are to be

seen in the homes of the Indians. A similar remark would apply to several of the other agencies in the superintendency. The tendency throughout the province is in the direction of progress, and each year bears witness to some mark of improvement on almost every one of the many reserves. Improvement is noticeable in the style and method of construction of some of the barns, sheds, and outhouses generally ; and in places where the reserves are specially adapted to cultivation, well-stocked barns of hay and grain meet the eye at almost every turn. Cattle-rearing is carried on to a limited extent in the agencies on the mainland of British Columbia, and in the Cowichan agency, but not by any means to the extent to which that industry is capable of being conducted when the resources at the disposal of the Indians are considered. Large tracts of land there are that could profitably be utilized for grazing ; and there is every reason to expect that in the course of a few years many more of the Indians will devote, if not their whole time, at least as much of it as the importance of the question demands. Large numbers of cattle (which term includes the domestic animals generally seen on the ordinary farm) are annually imported into the province to supply the incessant demand which seems to be ever on the increase. Markets for such animals and their products are rapidly opening up in all parts of the country ; and this fact will no doubt stimulate the occupants of land on the various reserves to a realization of the profits awaiting them from this important branch of agriculture—one that tends to the enriching of the land, and not as in the case of the production of grain and roots, which rapidly depletes the soil of its fertility, unless suitable recompense be made to it for its recuperation. The character of the stock possessed by the Indians is each year becoming better and more suited to improved conditions. From time to time during the past year, as well as hitherto, numbers of cattle of improved breeds have been imported into British Columbia from not only points in Eastern Canada, but from Great Britain as well, by several well-to-do persons and energetic live stock associations ; and these animals scattered as they are all over the province, cannot but tend materially to the improvement of the stock possessed by the Indians. Already the progeny of some of these imported cattle has found its way into the hands of some of the Indians, and there exists quite a friendly rivalry between members of the different reserves in the matter of the possession of the best cattle.

Owing to the expenditure for irrigation incurred by the department on some of the reserves in the Kamloops-Okanagan agency—notably at Halant and Haltkam—considerable areas of land hitherto unsuited to agriculture for the want of water have been brought under a good state of cultivation. Surveys for similar constructive work were made for the Bonaparte reserve, and with the advance of money made to the Ashcroft Indians much permanent good seems sure to follow as a result of the steps taken for the advancement in agricultural pursuits of the Indians so generously dealt with.

Numbers of mowing and reaping machines are owned by the Indians on the various reserves in the agricultural districts ; and in the Cowichan Valley it may be said that all the threshing performed, both for white farmers and for Indians, is done by Indians operating their own machines.

Most of those Indians who went for employment to the salmon canneries on the Fraser river returned at the close of the fishing season to their homes with little, if any, money. Large numbers of people of many nationalities were on the river for the purpose of taking part in the operations attendant on the catching, cleaning, and canning of the fish ; and no sooner had the fishing season opened than rumours of trouble began to be heard on all sides. A difference arose between the cannery-owners and the fishermen, who comprise chiefly whites, Indians and Japanese, as to the contract price of fish. The white fishermen, in contradistinction to the Japanese fishermen, asked a higher rate per fish, which they were to catch, than the cannery-owners were willing to pay. The Japanese fishermen were willing to fish on the terms laid down by the cannery-owners, but not so the white men and Indians. The Indians, along with the white fishermen, held out persistently for the higher rate and there

occurred such friction between some of the whites and Japanese, resulting in cutting of expensive fishing nets and other overt acts, that the local justices of the peace found it necessary to have despatched a detachment of the local militia to the scene of the disturbance at Stevenson, where they were held in readiness for operations, for some days, should a riot occur. Fortunately, the Indians took no active part in the demonstration against the Japanese, although it required the greatest tact on the part of Agent Devlin to prevent some of the Indians of the Northwest Coast agency from asserting their hostility to the Japanese. Mr. Devlin is deserving of the greatest credit for the manner in which he kept the Indians in check, which perhaps prevented a resort to brute force. Some of the Indians, seeing the state of affairs, would not remain longer at the canneries, and returned to their homes. Altogether it may be said that the earnings of the Indians on the Fraser river fell far short of expectations. To aggravate matters still further, the Indians of the Pemberton, Douglas and Harrison districts in the Fraser agency lost most of thir crops, poultry and stock by floods ; and were it not for the intervention of the department in supplying seed to them, considerable suffering would no doubt have resulted.

With the exercise of economy and their ablest efforts, these Indians should soon be as comfortable as before being overtaken by their calamity. At the salmon canneries on the Skeena and Nass rivers, as well as at Rivers inlet and Alert bay, good catches were made by the fishermen, and in consequence the Indians made splendid earnings, considering the duration of the fishing season. They were thus enabled to make ample provision for their wants, and in the Northwest Coast and Kwawkewlth agencies, where these good catches were made, the Indians felt that they had much to be thankful for when the result of the operations on the Fraser river were compared with their season's work. A large run of salmon up the rivers of the Northwest Coast agency means also an ample winter's food supply for the Indians of a great portion of the Babine agency. Large quantities of salmon, which is one of the food staples of the Babine agency Indians, were caught by them, and reports from that district indicate that the Indians laid in all the food in this line that they required.

Of late years considerable sums of money are being earned by certain of the Indians of the Babine agency in packing for prospectors and miners, in acting as guides and in the various avocations incidental to those pursuits in life. Some of these Indians also repair to the canneries on the Skeena each year, where they find remunerative employment. A few of them have been known also to seek employment at the hop-fields in the State of Washington, D.C., but, as a rule, the Indians who go there to look for work are chiefly those from the West Coast and Cowichan agencies.

A number of Tsimpsheans from the Northwest Coast agency also pick hops in the fields of the State of Washington, but when their expenses to and fro are deducted from their earnings thereat, so little is left them that it were almost better had they remained at home. With the assistance rendered to certain of the Kootenay agency Indians by the department for the irrigation of some of their lands, much encouragement has been given them, and with good markets in their vicinity, consequent on the opening up of the various mineral deposits for which that part of the province is noted, no further stimulus would appear to be necessary to cause these people to abandon altogether their hunting life and devote the most of their time to the pursuits of agriculture.

Education.—The new boarding school at Squamish mission, Fraser agency, and the Clayoquot boarding school, West Coast agency, opened under favourable auspices, and so far give every reason for believing that the work that has been so well undertaken will be carried on with zeal and intelligence.

As a rule the Indian children do not at first take kindly to boarding and industrial schools ; the necessary discipline, involving as it does a certain degree of restraint, rather tries their patience, and it is difficult to curb their longing for a return to the scenes and associations of their parents, where their movements are as free as the wind that blows.

The quarterly reports and other returns from the several industrial and boarding schools of the superintendency, which have periodically been transmitted to the department during the year, indicate that, on the whole, a slow, yet steady, advance, both in the elementary branches of education taught at such institutions and the manual training given the pupils, is manifest. There is, however, scarcely the same incentive to study among the Indian children of the various establishments as is the case with children of white people similarly situated. In the latter instance many of the parents of the white children have a keen appreciation of the advantages of a good education bestowed on their offspring, but on the other hand the parents of the Indian children knowing little, if anything, of the subjects dealt with from day to day by the teachers in charge of their children, naturally cannot take that degree of interest in the studies assigned the pupils.

The school work must, therefore, suffer just to the extent indicated by the lack of interest displayed by the adult Indians, when compared with studies pursued by children of white parents in similar institutions of instruction. The principals and teachers, recognizing this fact, do their best to urge the pupils to increased action, and every effort is put forth by the management of the school, as well as by the agents of the department, to foster among the Indians generally that spirit of interest in education which forms so essential a feature of school life, and the results attained testify in a measure to the assiduity of the task. Habits of neatness, orderliness and an appreciation of the value of time and discipline must result from the education afforded such of the Indian children as are privileged to attend the many schools now in operation for their benefit.

As the country is rapidly opening to settlement and the white population is consequently coming daily into closer contact with the aborigines, the lessons of experience thus acquired by them from day to day may in time prove a factor for incitement to still further efforts for general advancement.

Religion.—Most of the Christian denominations have their representative clergymen stationed at convenient centres throughout the superintendency ; and it may be stated that the spiritual needs of the several bands are fairly well supplied. Religious worship is held by each of the missionaries at regular intervals, and the attendance is all that could be desired.

In some instances the places of worship are quite remote from the houses of some of the Indians ; yet that fact does not militate materially against the attendance at church, for if the Indians feel that the distance is too great to be conveniently undertaken on foot, they then call into requisition their own vehicle, if possessed of one, or, if not, of one borrowed from an Indian neighbour. If no vehicle be at hand, and the journey can be made by water, a canoe is made the mode of conveyance. The Indians rather enjoy attending divine service, for in addition to the spiritual benefits received as a result of prayer and teaching imparted to them, they are given an opportunity of meeting friends and acquaintances from far and near. Considerable sums of money are yearly expended by the Indians in the erection of new churches, and in the making of repairs to old ones, and keen interest is at times manifested by them when matters of a religious nature are introduced, either in the course of ordinary conversation or at the many meetings held on the various reserves from time to time to discuss subjects affecting their welfare.

Characteristics and Progress.—Most of the Indians of the superintendency have a fondness for the earning of money, and to such an extent is this the case that often when in search of employment nearly as much cash is expended in journeying from their homes and returning thereto as is earned at the work sought for. This is the case with the great majority of those who resort to the hop-fields in the adjoining State of Washington. It is pleasing, however, to contemplate that the Indians evince such a desire to provide for their wants ; and their display of energy and industry is worthy of the highest commendation.

Many of the Indians of the Babine and West Coast agencies eagerly look for, and obtain, employment as packers, guides and canoemen for prospectors and miners, and give general satisfaction. Where there is money to be made, the Indians are eager to earn it, and in former years their labour was entirely depended on for the yearly catch of salmon at the several canneries in the province. Latterly large numbers of Japanese have entered the field of labour and the earnings of the Indians at the fisheries are consequently considerably reduced. Along some portions of the coast considerable sums of money are earned by certain of the Indians in hand-logging, which occupation is at present quite a remunerative one.

With regard to the respect shown for the observance of law and order, it may fairly be said that the Indians are almost models in this matter, the major portion of the charges laid against them being for the possession or use of intoxicants.

Temperance and Morality.—Taking into consideration the circumstances, surroundings and associations of the Indian population, it should be considered a matter for congratulation that their conduct is as good as it is. The number of convictions obtained against Indians on account of the liquor habit, and the evils arising therefrom, is not many when a comparison is made between it and the total Indian population of the province. Good work is being done by the zealous and energetic missionaries of the several churches working amongst the aborigines and the tendency under the head now reported upon is towards a higher degree of refinement.

General Remarks.—Less than a score of years ago many Indians along the seacoast of the province found profitable employment working as deck-hands, and at other such labour on the passenger and freight steamers plying to and fro ; of late years, however, white labour has almost wholly supplanted that previously employed ; and the Indians hitherto engaged had to look elsewhere for work, or remain at home on their reserves. In the canneries, particularly those of the Fraser river, large numbers of Chinese and Japanese are employed to the detriment and monetary loss of the Indians. The tendency at present existing is for most of the Indians to remain either on or in the vicinity of their reserves and earn as much as possible without going any distance from their homes. On the Skeena and Nass rivers, Chinese and Japanese appear to be fast supplanting the Indians, and a similar state of affairs is noticeable at Rivers inlet, further south.

The medicines supplied to the missionaries and others by the department have done much good in the alleviation of suffering. Drugs are usually sent only to outlying districts where no doctors are stationed, and only the destitute sick are given medicine at the expense of the department.

The seed grain and implements kindly supplied from time to time have proved quite acceptable to those Indians who were so unfortunate as to require such aid.

I have, &c.,

A. W. VOWELL,
Indian Superintendent.

BRITISH COLUMBIA,
REPORT OF INDIAN RESERVE COMMISSIONER,
VICTORIA, October 24, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report upon work performed during the past year by the Indian Reserve Commission and by the Surveyors employed in connection therewith.

On April 25 last, Surveyor Skinner, under my instructions, proceeded to Skeena river, there to complete the survey of reserves for the Kitwangar, Kitselas, Kitsumkaylums and Kitkahtla bands of Indians ; this work was finished by September 6 ultimo, when he discharged his field staff and returned to headquarters, reporting himself at Victoria on the 17th ultimo.

Three days later he was sent to Canoe creek, on the upper Fraser, and instructed to survey the following reserves, viz. : No. 4, Spilmouse, 400 acres ; No. 5, Fish lake, 105 acres, and No. 6, Toby lake, 440 acres. These reserves, I may state, were laid off by the late Reserve Commissioner in 1895. Mr. Skinner returned to Victoria on the 14th instant, when he reported the completion of the last named work satisfactorily ; he has since been engaged in the office completing his accounts and getting his field-notes, &c., in order. His report for the season's work, I may add, was forwarded to the department on the 16th instant.

Surveyor Green's work in the early part of the year has been the plotting and examining of the field-notes of Messrs. Skinner and Devereux in connection with work done by those gentlemen in 1900 ; he has also been engaged in making tracings of the plans resulting from the above, for the department, for the provincial government, for the different Indian agents, and for the respective Indian chiefs whose people were particularly interested in such work. Later, under my instructions, he surveyed reserves at Sicamouse and Lytton, whilst at other times he has been employed at Chilliwack, Katzie, Nanaimo, Niskainlith lake and Cowichan, on business connected with Indian lands ; detailed reports in reference to the same having been duly forwarded to the department.

In accordance with arrangements made, of which the department was advised, I left Victoria accompanied by Surveyor Green on the 5th ultimo for Bella Coola with the intention of proceeding from that point for the purpose of defining reserves for the Indians inhabiting the country to the north of Chilcotin. Two bands of Indians resident at Uhlcatcho and Cluskus lakes, respectively, have been visited, and reserves, which include their fisheries, hay meadows and gardens, have been laid off for them much to their satisfaction. At Uhlcatcho the natives number seventy-one, and at Cluskus there are seventy-nine.

Owing to the extreme roughness of the country traversed, its wild and unsettled condition, the long distances to be covered, the absence of reliable means of transport, &c., I was forced to be absent from Victoria much longer than I anticipated, especially as I was detained upon the coast for nine days after my return to Bella Coola on account of the very irregular steamboat service prevailing in these waters.

As soon as it is possible to do so, a full report in connection with the work last mentioned will be forwarded to the department, together with sketches, minutes of decision, and all further returns usual in connection with such matters.

In conclusion I have much pleasure in stating that the work yet to be done as regards *the laying off* of reserves for Indians in this superintendency has been within the last two or three years reduced to a minimum ; the principal work requiring attention at the present time being the survey of those parcels of land already apportioned for the needs of the Indians.

I have, &c.,

A. W. VOWELL,
Indian Superintendent and Reserve Commissioner, B.C.

BRITISH COLUMBIA,
VICTORIA, B.C., October 16, 1901.

A. W. VOWELL, Esq.,
Indian Reserve Commissioner,
Victoria, B.C.

SIR,—I have the honour to present the following report covering the past season's work.

In obedience to your instructions I left Victoria on April 25, by the steamer *Princess Louise,* en route to the Skeena river, to complete the surveys for the Kitwangar, Kitselas, Kitsumkaylum and Lakelse tribes, and arrived at Port Essington on the 30th.

I was detained at Port Essington until May 4, when taking passage on the steamer *Hazelton,* I proceeded up the river, and arrived at Kitselas on the 7th, where I set camp, and commenced the surveys for the Kitselas tribe.

The work upon Kitselas reserve No. 1, occupied me until June 6, when owing to the rapid rise in the river, rendering it impossible to proceed up, I moved to reserves No. 4 and No. 4A, the work upon which occupied me until June 27. From this point I moved to reserve No. 5, on the 28th, and commenced work the next day, completing the survey on July 5.

On my return to Kitselas on July 6, I found the water still too high in the canyon to permit passage by canoe. I therefore placed all my camp equipage on the steamer *Hazelton* on the 8th. An accident to the steamer while in the canyon caused the loss by drowning of one of the men engaged by me, the steamer being subsequently compelled to return for repair.

On July 10, I started up river on the steamer, and arrived at Kitwangar reserve No. 8 on the 11th. Commencing the survey of this reserve on the 12th, I completed it on July 15, moving to Kitselas reserve No. 7 the following day. Having completed this and reserve No. 3, I moved to reserve No. 2 on July 25, commencing work the next day.

The work upon reserves Nos. 2 and 2A occupied until August 13, the ground being very rough, with a dense growth of timber and brush.

From reserve No. 2 I moved to No. 1, and completed the survey of the south boundary, concerning which I had asked for instructions.

Leaving reserve No. 1 on August 19, I arrived at reserve No. 6 and commenced work the same day, completing the survey on August 20, thus having surveyed all the reserves for the Kitselas tribe of Indians.

From this place I moved to Kitsumkaylum reserve No. 1, on the 20th, and checked the lines and traverse upon this reserve, moving to reserve No. 2 on August 23. Having completed the survey, I returned to reserve No. 1 on the 28th, and moved to Lakelse river the following day.

At this place I found the reserve quite deserted, no Indians were residing there, and no improvements of any kind had been made for years past, except one small fishing house, situated about six chains outside the reserve, as defined by the Minute of decision. Under the circumstances, I decided not to make a survey before reporting the facts to you.

Leaving Lakelse river on August 30, I arrived at Port Essington on the 31st.

On Monday, September 2, I started for Pitt island to survey the reserve there for the Kitkahtla tribe of Indians. Arriving at the reserve on the 3rd, I finished the survey on the 5th, moving back to Essington the following day, where I paid off the men engaged on the river. I was detained at Port Essington until the 12th, when taking passage on the steamer *Tees*, I arrived in Victoria on the 17th.

Leaving Victoria on September 20, en route to Canoe creek, I arrived at Clinton on the 23rd, where I secured the services of the necessary men and provisions. Leaving Clinton on the 24th, I arrived at Canoe creek reserve No. 6 on the 25th, commencing work the following day. Having finished the survey of this reserve on September 30, I moved to Canoe creek reserve No. 2 on October 1, from whence I made the necessary connection to reserve No. 4. Moving camp to reserve No. 4 on the 3rd, I commenced the survey on the 4th, completing it on the 7th. From this point I made the connection to, and the survey of reserve No. 5. This completed the surveys for the Canoe creek tribe of Indians.

A serious accident to my transit instrument would, I found, prevent my undertaking the surveys for the Douglas tribe of Indians entrusted to me. I therefore left Canoe creek on October 11, and returned to Victoria, where I arrived on the 14th.

I inclose a schedule of reserves surveyed and mileage run, which will, I trust, be satisfactory. The extremely rough and mountainous nature of the country on the Skeena river section, coupled with the difficulty in obtaining competent labour, prevented rapid progress.

I have, &c.,

E. M. SKINNER.

SCHEDULE of Reserves Surveyed by E. M. Skinner—1901.

Date.	Tribe.	Name of Reserve.	No.	Chains.	Miles.	Chains.
May	Kitselas	Kitselas	1	900·09	11	20·09
June	"	Kshish	4	479·43		
"	"	"	4A			
"	"	Zymoetz	5	59·77	3	59·20
July	"	"	5	160·65		
"	Kitwangar	Chiginkaht	8	154·28		
"	Kitselas	Ketoneda	7	131·47		
"	"	Ikshenegwolk	3	148·93		
"	"	Chimdemash	2	234·97	10	30·40
August	"	"	2	247·49		
"	"	"	2A	217·92		
"	"	Kulspai	6	55·50		
"	Kitsumkaylum		1	392·22		
"	"		2	185·00	13	58·13
September	Kitkahtla	Klapthlon	5A	164 03		
"	Canoe Creek	Meadow	6	240·00	5	04·03
October	"	Spilmouse	5	260·00		
"	"	Connection	.....	113·37		
"	"	Fish Lake	4	148·70		
"	"	Connection	.....	72·48	7	34·55
					54	46·40

E. M. SKINNER,
Surveyor in Charge.

(Received too late for publication in proper position.)

NOVA SCOTIA,
MICMACS OF YARMOUTH COUNTY,
YARMOUTH, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report and tabular statement for the year ended June 30, 1901.

Vital Statistics.—The population of the Indians of Yarmouth county is eighty-four, a decrease of one for the past year.

Health.—The general health of the Indians has been very poor during the past year.

Occupations.—About ninety per cent of the Indians live by hunting, fishing, berry-picking, making baskets and mast-hoops ; the remainder of them do logging and work in saw-mills.

Education.—The attendance at school this year has been very poor ; on account of the small-pox scare the Indians fled to the woods.

Religion.—The Indians are all Roman Catholics.

Temperance and Morality.—With the exception of a few, the Indians are temperate ; they are also moral in other ways.

I have, &c.,
W. H. WHALEN,
Indian Agent.

REPORTS OF PRINCIPALS

OF

BOARDING AND INDUSTRIAL SCHOOLS

PROVINCE OF ONTARIO,
ST. JOSEPH'S INDIAN HOME,
FORT WILLIAM, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—We have the honour to submit our annual report of the St. Joseph's Home for the year ended June 30, 1901.

Location.—The St. Joseph's Home is situated on the south bank of the Kaministiquia river, on a high and airy hill, about one and a half miles west of the town of Fort William, on the Fort William Indian reserve.

Land.—The area of land in connection with the school on this Fort William Indian reserve in the district of Thunder bay, is but one acre. It belongs to the reserve and is vested in the Crown. The land is sandy and needs much careful work in order to raise anything. When well cultivated, vegetables, seeds, &c., grow very rapidly.

Buildings.—The main building is of frame, two stories high, wth stone foundaton and good basement. It is used as a home for the pupils. Since last report we have had the walls in many of the rooms painted, some of which work was done by the pupils.

The outbuildings consist of a building used as a storehouse, a smaller house for the chickens, which was painted during the past year, and another building a short distance from the main building, used for class-rooms.

Accommodation.—There is accommodation for thirty-five pupils and about six of a staff.

Attendance.—The total number in attendance during the year was about thirty-five, and also about thirty day pupils.

Class-room Work.—The authorized programme of studies is followed. Most of the children are fond of class and are very attentive. Outside of school hours the pupils have regular time for study.

Farm and Garden.—There is no farm in connection with the school. Gardening is done on a small scale. We have some of the different kinds of vegetables planted, all growing nicely.

Industries Taught.—The girls are taught or trained in the art of general housekeeping, also in laundry-work, baking, mending, knitting, dressmaking, cutting, &c. The garden furnishes considerable occupation for the boys during the summer months. In the winter they are employed with the wood and water, sweeping and errands of trust, &c., when not in class.

Moral and Religious Training.—Our main source of consolation is the moral and religious training of the children, which receives special care. Obedience and respect for authority is insisted upon. Morning and evening prayers are attended in the chapel, and a certain time every day is devoted to instruction in Christian doctrine.

Health and Sanitary Condition.—The general health of the pupils has been good during the year. One case of pneumonia, however, ended fatally, taking from us one of our biggest girls, who was ill only five days. This spring, the village was visited by a bad form of measles and our children did not escape the contagion. For a while we had to turn our home into a kind of hospital, as nearly all the pupils were very

sick at the same time. We were sorry to lose one dear little girl ; the disease seemed to go to her lungs and carried her off very quickly. The sanitary condition of the school is good, owing to its healthful location and general arrangement.

Water Supply.—The water is drawn from the river by means of a force pump placed in the basement, which conveys the water to a tank fixed near the top of the building, from which the water supply is distributed by means of lead pipes to different parts of the institution.

Fire Protection.—The school has three Star glass-lined fire-extinguishers placed in different parts of the building, also two fireman's axes in readiness.

Heating and Lighting.—The Home is well heated by two hot-air furnaces, wood being the fuel used. The only means at present of lighting the building is coal oil lamps.

Recreation.—Outdoor games are encouraged, and freely indulged in by the pupils. The boys enjoy football, rowing and fishing more than any other games. We have a grand river for rowing, and both girls and boys delight to go out for a row. It is considered a great reward for work well done to go out on the water for an hour.

General Remarks.—We gratefully acknowledge the kindness of the department in supplying us with school material, also the kindness of our agent, Mr. J. Hodder, to whom we feel indebted for his earnest co-operation in all matters connected with the school. The conduct, as a whole, of discharged pupils has been satisfactory.

Our staff consists of six teachers, viz. : Sister M. Matilda, employed as cook, who teaches the bigger girls the art of baking, cooking, laundry work, &c., ; Sister M. Dionysia has charge of the pupils out of school hours, teaching them general housework ; Sister M. Magdalene is seamstress and general help ; Sisters Ambrose and Ignatia instruct the pupils in school, and Sister M. Aldegondes acts as principal.

We have, &c.,

SISTERS OF ST. JOSEPH.

PROVINCE OF ONTARIO,
MOHAWK INSTITUTE,
BRANTFORD, August 7, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to transmit herewith a report on the Mohawk institute, for the year ended June 30, 1901.

This institute was established by 'The Corporation for Propagating the Gospel in New England,' briefly 'The New England Company,' in the year 1831.

Location.—It is situated a mile and a quarter from the centre of the city of Brantford, most of the farm lying within the city boundary, seven miles from the Grand River reserve.

Land.—The land occupied by the school comprises four hundred and ten acres, as follows :—Lot No. 5, Eagles Nest, township of Brantford, ten acres, Crown grant (on this are the buildings) ; one hundred and ninety-four acres by license of occupation ; part Lot 2, Eagles Nest, in the city of Brantford, twenty acres, purchased ; Mohawk Glebe Lot, city, one hundred and eighty-six acres, rented.

Buildings.—The buildings are of white brick, having a basement, first and second floors with a third floor in part arranged in case of need as a hospital, for contagious diseases.

The basement of the main building contains girls' play-room, clothes-room, lavatories, kitchen, dining-rooms for employees, pupils' dining-hall and store-rooms.

The first floor contains two large school-rooms, sewing-rooms, officers' quarters and offices.

The second floor contains dormitories and hospitals.

The west wing of the building forms the superintendent's residence.

The laundry, a detached two-story brick building, is fully equipped and has shower-baths for the girls.

The boys have a two-story play-house at some distance from the main building. The basement (brick) contains clothes and dressing-room ; lavatory, with shower-baths ; the upper story (frame) contains band-room, reading-room and play-room.

All floors are of hardwood, oiled, excepting the play-rooms, which have cement floors.

The farm buildings are extensive, having accommodation for sixty cattle, seventeen horses and one hundred and twenty pigs. There are also two greenhouses, three silos, an ice-house, two poultry-houses, one of which has been erected this year, as was also a new dairy (brick), 17 x 13 feet, costing $222.

Accommodation.—Accommodation is provided for one hundred and twenty-five pupils, fifty-five boys and seventy girls, and a staff of eleven officers.

Attendance.—The quarterly returns for June 30, 1901, show an attendance of fifty-six boys and sixty-nine girls, classified as follows :—

	Pupils.
Standard I	6
" II	9
" III	51
" IV	26
" V	10
" VI	23
	125

The average attendance for the year was one hundred and twenty-six.

Class-room Work.—Class-room work covers the full course of the public schools of Ontario.

The educational progress has been very satisfactory, as may be seen by comparison of last year's classification with this. For improvement in English-speaking a kindergarten teacher from the city schools gives three lessons a week, in the afternoons, in English conversation upon common things.

One pupil passed the entrance examination and is taking her training as a pupil teacher in the junior school here, another has been appointed teacher at the Bay of Quinté.

The school hours are from 8.30 to 12 a.m., and from 1.30 to 4 p.m., in summer ; and in winter, from 8.45 to 12 a.m., and from 1.30 to 4 p.m., and from 7 to 8 p.m.

All pupils in standards V and VI have private study from 8.30 to 9.30 p.m.

Pupils form two divisions, A and B, first week A division attends school in the morning, B division in the afternoon ; second week the order is reversed.

The pupils of standard I are in school full time throughout the year, and those of standard II during the winter months.

Farm and Garden.—The balance-sheet of this department shows that the result of the year's work is encouraging. The grain and potato crops were not as good as usual, and much of the wheat had to be ploughed up, being winter-killed ; other crops were satisfactory ; corn was a magnificent crop, from which, in addition to filling three large silos, we had seven hundred bushels of matured corn.

Dairying, and in connection therewith, hog-raising, are the best paying branches of farming at present.

Industries Taught.—*Carpentry and Painting.*—Under instruction the boys do all the work for the institution, farm and the mission stations on the reserve.

Brass Band.—The band-master returned from South Africa in November last and re-organized a band of fifteen boys, who have made excellent progress.

Farming and Gardening.—This forms the principal occupation of the boys, including the management of hothouses and a dairy of thirty to forty cows.

Girls' Work.—The girls are trained in domestic work, including sewing, knitting, cooking, baking, laundrying and butter-making. Those completing the course have no difficulty in finding situations at good wages.

Moral and Religious Training.—Morning and evening prayers are conducted for the whole school daily, and divine service at the Mohawk church at 11 a.m. on Sundays. Religious instruction is given daily in the schools, and on Sunday from 9 to 10 a.m., 2.30 to 3.30 p.m. and 7 to 8 p.m.

The boys are organized as a company of cadets, divided into four sections under senior boys, who are responsible for the cleanliness and order of their respective sections. Four section monitresses exercise similar supervision over the girls.

Health and Sanitary Condition.—The health of the pupils has been exceptionally good, though unfortunately two deaths occurred, one from heart disease, the other from meningitis ; there were also two cases of typhoid fever, one contracted through a visit to the city with friends, the second was a newly admitted pupil who had not been here a week—both recovered.

Water Supply.—Water is pumped by a windmill from a well to two large cisterns on the top of the building, and to meet the increased demand, caused by flush-closets, a new tank and tower have been erected this year. There is a horse-power attachment to the pump for use in the absence of wind.

Fire Protection.—Every dormitory is furnished with two or more fire-escapes, and for further protection we have one 'Fire King,' twelve 'Ever-ready' fire-extinguishers, fire grenades in all principal buildings, axes and also buckets filled with water in specified places.

Heating and Lighting.—The buildings are heated throughout with coal furnaces (six), furnishing a constant supply of warm, fresh air, the foul air being removed by heated flues drawing it off from the floors. All buildings, stables included, are lighted by electricity.

Recreation.—The recreation hours are one hour at noon, two hours in the evening, in summer, and one hour in the winter, and for school divisions throughout the year from 4 to 5 p.m. ; also one-half holiday each week.

There is no school from July 16 to August 21. During this time the master and governess take their vacation ; each pupil has half a day holiday and the industrial work of the institution goes on as usual.

The boys are furnished in their play-ground with swings and horizontal bars ; they also have a field where they play cricket, baseball and football. The girls are provided with swings, croquet, balls, skipping ropes, &c. Those who prefer to read, are furnished with magazines and books from the school library, and the boys have the daily newspapers sent to their reading-room.

I have, &c.,

R. ASHTON,
Superintendent.

PROVINCE OF ONTARIO,
MOUNT ELGIN INDUSTRIAL INSTITUTE,
MUNCEY, August 14, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—With unabated pleasure and delight in this work, I herewith transmit to you my twentieth annual report of the conditions and prospects of this growing institution. I am happy to say that this first year after our jubilee report promises to be a record-breaker in all but the wheat.

Location.—Our location is on the south bank of the River Thames, and is beautiful for situation. It would be difficult to find a more suitable site. Our nearest station is Muncey, on the St. Clair branch of the Michigan Central railway, about a mile from the institution. We are thirteen miles from the rising railway city of St. Thomas, and twenty miles from London.

Land.—The two hundred and four acres of land assigned for the industrial farm is all that could be desired in quality, but not in quantity. To make up for the lack in quantity, we lease, through the department, about three hundred acres of the Oneida reserve, just opposite, and reaching from the river bank back to high-water mark, and nearly one hundred acres are rented on the Muncey side of the river. This land is annually overflowed, and as a consequence it is nearly as rich as the valley of the Nile. It is the choicest of pasture land and is principally used for that purpose. With a grant of only $60 per pupil to cover all expenses, and very largely to do all the labour part of the improvements, and no other source of supply but the farm, it requires the utmost economy to cover expenses. If the department would relieve us of the burden of rent by adding about three hundred acres to the farm, it would wonderfully assist.

Farm.—It will give some idea of our farming operations to say that our jubilee harvest last year gave us about 1,700 bushels of wheat, 2,000 bushels of oats, 3,000 bushels of corn on the cob, 300 tons of ensilage, over 200 tons of hay, and an abundance of roots and fruit for institution purposes. We were able to handle to advantage two hundred and twenty head of cattle, and horses, hogs and poultry in like proportion. Having all modern appliances for harvesting, threshing, and grinding, also a competent staff of white men to take the lead in all departments, the work is largely converted into a recreation.

Buildings.—Apart from the group of buildings proper, we have two comfortable residences : one for the foreman of all departments, and the other for the foreman over the live stock. The reconstruction of the old institute gives us two excellent school-rooms, two private residences, one for the cook, the other for the watchman, and also a hospital of four wards. This building, with its elevated shape, slate roof, all new doors and windows, and covered with cement blocked in imitation of stone, is not thought of as an old building.

School-room.—Under our system of careful classification we have all the advantages of a graded school, so that two professional teachers have handled an average of over one hundred pupils successfully. Our text-books, promotion papers, and higher examinations are all the same as the public schools of Ontario ; and we are subject to the county school inspector. The boys' department, including play-room, lavatory, assembly-room, is all under daily inspection by the male teacher, while the corresponding inspection of the girls' department is a part of the daily charge of the matron.

Accommodation.—The number of pupils authorized by the department is one hundred. Our average for the year is slightly in excess of that. The completion of the two attics for dormitories affords accommodation for fifteen more girls and the same number of boys. Our pupils this year represent sixteen reserves.

Religious Training.—The regular family worship and Sabbath school services are rendered more attractive by the alternate reading of the scriptures, judicious questions, illustrations with the use of maps, blackboards, charts and plenty of music. We have two missionary churches at less than a mile from the institution, in opposite directions, and the pupils attend these once a Sabbath alternately. The church that furnishes the best music, or the brightest service with plenty of illustrations, is the drawing card.

Sanitary Condition.—An abundant supply of living water, first-class ventilation, and a complete system of sewerage, account in part for the excellent health of the pupils.

Heating and Lighting.—Our hot-water heating system in the main building and annex is not only economical, but it and the lighting by acetylene gas lessen the danger of fire. A system of hose and chemicals is so located as to provide against an incipient fire in any part of the building.

I have, &c.,

W. W. SHEPHERD,

Principal.

PROVINCE OF ONTARIO,
THE SHINGWAUK AND WAWANOSH HOMES,
SAULT STE. MARIE, September 13, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of the Shingwauk and Wawanosh industrial schools for the fiscal year ended June 30, 1901.

Location.—The Shingwauk and Wawanosh homes are situated on the bank of the St. Mary's river, one and one-half miles east of the central part, and within the town limits of Sault Ste. Marie, in the province of Ontario. The homes are not situated on any reserve.

Land.—The area of land in connection therewith is ninety-three acres, comprising park lots one and two in Tarentorus township, which was acquired by purchase, and is held in trust by His Lordship the Bishop of Algoma. Originally forest, the land is now, with the exception of a few acres, cleared. The soil is extremely light and rocky, and is best adapted for grazing purposes. A large portion of it is quite useless for farming purposes.

Buildings.—The buildings are admirably situated, fronting the river, and are sheltered on the north and west by woods, and groves of birch and maple. They consist of :—

The Shingwauk and Wawanosh homes, or main block, one hundred and sixty feet by thirty-seven feet, with various wings and principal's residence adjoining, in which are the offices of the institution, main dining-hall, kitchens, visitors' entrance, staff-rooms, furnace-rooms, store-rooms, lavatories and dormitories. A little to the east, and almost in line with the main block, stands a large two storied frame building, sixty feet by thirty feet, the ground floor of which is used as a drill-hall and play-

room for the boys. On the upper floor the senior class is held ; a bright, cheery room, equipped with automatic desks, large wall maps, globes and all necessary school material.

Some fifty yards from this building, partly screened by clumps of maples, and standing due east and west, is the Bishop Fauquier memorial chapel, erected in 1883 by funds subscribed anonymously in England and Canada, as a tangible, enduring and useful memorial to Algoma's first revered bishop.

Facing the homes and chapel are two more buildings : (a) our hospital, with attendants' cottage adjoining, standing in all its usefulness of isolation. A bright, cheery building, with wards containing six beds, convalescent room, kitchen and dispensary ; (b) the farmer's cottage, with frame laundry, twenty by twenty feet, annexed, five minutes' walk from which brings us to the factory or carpenter's shop, situated on a point running well out to the river, and with foreman's cottage close by. Add to the aforementioned buildings the shoe-shop, situated in rear of the main block, barns, stables and various minor buildings equally indispensable in their particular spheres of usefulness, and a good idea is obtained of the Shingwauk property as it stands to-day. Since my last report, the following repairs and alterations to the girls' home have been effected, viz. : completion of flooring, painting of interior and exterior, and building new closets and coal shed, building lumber fence back of girls' home, building refrigerator and ice-house, laying tile drains, and general repairs, such as glazing and painting.

There is accommodation in the schools for one hundred pupils (sixty boys and forty girls), and twelve members of staff.

Attendance.—The total number of pupils in residence during the year was eighty-six, namely : seventy boys and sixteen girls. The average daily attendance was seventy-one.

Class-room Work.—The school is divided into senior and junior divisions, under the tuition of two teachers, in separate buildings. The hours of attendance are from 8.30 to 12 a.m., and 1.30 to 5 p.m., with fifteen minutes recess during the middle of each session.

There is also an hour of study from 7 to 8 p.m., Wednesdays and Saturdays excepted.

Excellent progress was made in both schools. Thirty boys qualified for promotion into higher grades, and one passed the high school entrance examination.

Interesting as every part of our work is, the junior school affords special interest and attraction. It is here that patience, tact and kindness are so especially essential in breaking down the young Indians' natural shyness and reserve, in bringing them out of themselves and winning their confidence. If the newly-admitted boy is wholly untaught, and quite devoid of any English—as many of our pupils are on admission—his progress at first is necessarily slow. He is first taught and made to repeat after the teacher the names of different objects in the room and out of it, and with the aid of kindergarten material, he learns to count and form letters. If a fairly quick lad, in a few weeks he will be in the A.B.C. class ; once there, his sole aim and desire is to pass into the first part of Book I, which, as soon as accomplished, scores for him his first recognized promotion. From now on promotion should be more rapid, but depends necessarily to a large extent upon the pupil's personal efforts.

Industries Taught.—The boys are taught carpentry, shoemaking and farming ; the girls sewing and general domestic work.

Carpenter Shop.—Our carpenter shop, or factory, a detached building, twenty-four feet by forty feet, is fitted with steam power and machinery for planing, sawing and turning. A steam pump, for pumping water from the St. Mary's river into tanks situated in the main buildings and laundry, is also operated here. Every branch of carpentry work is taught by an experienced mechanic in charge. No trade has greater attractions for our boys, and they quickly becoming adept at it. Seven boys are at present apprenticed to the trade.

Shoe Shop.—This important branch of our work was kept fully engaged, principally in the resoling, patching and mending of boots and shoes for seventy to eighty pupils. Some new boots, and over sixty pairs of shoe-packs, were also manufactured here during the year.

Farm and Garden.—The farm is worked by a number of boys, with a practical farmer in charge. About forty acres are under cultivation, twenty of which consist of hay land. The soil is light, and is only worked to advantage when the seasons are particularly favourable. Barely sufficient roots and vegetables for our requirements were raised. Dairy produce realized $220.57. In winter, besides the care of the stock, the farmer and his boys are engaged in teaming, chopping and sawing wood for the institution.

Moral and Religious Training.—The religious training is that of the Church of England. Pupils and staff attend either the Shingwauk memorial chapel or St. Luke's pro-cathedral. Morning and evening prayers are held in the school-room every day, and Sunday school on Sunday afternoons. The pupils are always well behaved and reverent during the services. Methods of punishment adopted are fines, impositions, and keeping in to work on half-holidays. Corporal punishment is administered in cases of gross disobedience only, and as a last resource.

Health and Sanitary Condition.—Since October fourteen boys and four girls were laid up successively with typhoid fever, which has been so prevalent in our town and district during the year, and which malady, I regret to say, resulted in the death of one little Delaware boy, fourteen years of age.

The sanitary condition of the school is good. Drains are kept clean and regularly flushed. Lime and other disinfectants are used. All large refuse is placed in barrels and carted to the farm daily.

Water Supply.—The water is pumped from the river by steam-power through iron pipes into large tanks placed in the roof of the main buildings and laundry.

Fire Protection.—Hydrants are situated at convenient distances outside of the main building, and on each flat of the interior, to which one hundred feet of hose, kept ready for use in case of fire, can be readily attached. The Shingwauk home is also supplied with four chemical fire-engines and fireman's axes.

Heating.—The main building is heated throughout by a hot-water system. The plant comprises two No. 8 and one No. 7 Daisy boilers, sufficient Stafford radiators and connections. The system works well, and is satisfactory. Wood stoves are used for heating all other detached buildings, including the chapel.

Recreation.—In summer the chief recreations are football and baseball. Indoor games are provided in the winter, but skating and hockey on the St. Mary's river afford the principal attraction. Swings are provided for the girls and smaller boys. Books and magazines are also supplied from the school library.

I have, &c.,

GEO. LEY KING,
Principal.

PROVINCE OF ONTARIO,
WIKWEMIKONG INDUSTRIAL SCHOOL,
WIKWEMIKONG, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on this institution for the past year.

Location.—This industrial school is located on the unceded portion of Manitoulin island, ten miles north of Manitowaning agency in the Wikwemikong village, on the hillside which forms the west shore of Smith bay. The school is operated in connection with the mission, and the Indians, some years ago, granted us the use of about two hundred acres of land for the support of the mission and of the school together.

Buildings.—The boys and girls are educated in two different institutions, about two hundred yards apart, which are managed by two separate staffs of men and women, respectively, under the common superintendence of the principal.

The boys have their class and study-rooms, with refectory, wardrobe and play-hall in a two-story frame house 50 x 100 feet. The chapel, the rooms for the sick, the kitchen and the dormitory are in the main building of the mission. Therein is also the lodging of the staff. It is a large stone structure 110 x 60 feet, with two stories and a high French roof. The dormitory is very large, beautiful and healthful, being 110 x 45 feet, and 17 feet in height ; connected with it are the bath and shower-bath rooms, and the most perfect system of water-closets.

The girls' school is a frame building 108 x 50 feet ; on the second floor is a class-room, 40 x 20 feet, the chapel, a sewing-room and rooms for the staff. On the first floor is another class-room, the dining-rooms, the kitchen and two parlours. The dormitories and wardrobes are on the third floor. A few yards apart from this building is the wash-house, with two stories, 40 x 50 feet.

Towards the shore stand the blacksmith, tinsmith and paint shops combined. Close to the shore is the carpenter shop in connection with the saw-mill and wood-working machinery for planing, matching, turning, making mouldings, doors and sashes, &c. The shoemaker shop and the bakery are in the old mission building. There are, besides, in connection with the farm, three barns with spacious stables in the basement of each, piggeries, henneries, and sheds for agricultural implements and carriages.

Accommodation.—Ninety boys can be accommodated, and about fifty-five or sixty girls.

Attendance.—We have had present in the course of the year sixty-five boys and fifty-five girls, making a total of one hundred and twenty pupils. The department allows this year a grant of $60 per capita for one hundred pupils, but we have been notified that henceforth the same grant shall be paid for one hundred and twenty.

Class-room Work.—The class-room work is governed by the official programme of studies for Indian schools. The time appointed for it is from 9.00 to 11.45 a.m., and from 1.15 to 4.15 p.m., with a short recess in the middle of each session. There is also another hour of study at 7.00 p.m., for religious instruction and private work, such as reading, letter-writing, &c. The boys of the fifth standard were present in class only two hours and a half, the rest of the time being employed at their trades. In the same manner the big girls give the most of their time to sewing, dressmaking, knitting and all kinds of housework.

The pupils are about equally divided into four sections, and are under the tuition of four different teachers. The lower grades are taught in the same room with the day scholars.

Farm and Garden.—About a hundred acres of the land at our disposal is tilled, and the rest is used as a pasture. The farm is managed with a view to supplying the mission and the school with meat, vegetables, milk and butter. The quality of the land is fairly good, but very stony. The farm is well stocked with cattle, sheep, horses, hogs and chickens. The work is done partly by the boys, with the help of Indian workmen. About two acres are laid out and cultivated as a kitchen garden.

Industries Taught.—Boys in the fifth standard are trained to different industries from seven to ten a.m., and from three to six p.m. We had this year five carpenters, three blacksmiths, one shoemaker and nine farmers.

Besides this special training given to a limited number of boys, all the other pupils are employed a few hours daily, each one according to sex and ability, at various kinds of labour, such as sweeping, scrubbing, sawing and splitting wood, dairying, gardening, stock-feeding, helping in the kitchen, in the mill and on the farm.

The laundry work is done at the girls' school, a windmill supplying them with the water necessary.

Morals and Religion.—The pupils are instructed very carefully in morals and religion by their teachers and by the missionaries themselves, and great progress is made in that respect every year by the pupils in general. They attend all the religious services held in the church.

Health and Sanitary Condition.—An epidemic of typhoid fever that prevailed in this part of Ontario last fall broke out also at Wikwemikong. In nearly all the houses of the village as well as in the schools there have been some more or less severe cases.

In the schools we had at a time twenty-two pupils dangerously ill. It lasted nearly two months. But while in the village and in the surrounding towns many patients died, we have been fortunate enough to save all our dear children. About five weeks after the typhoid fever seemed to have disappeared, another epidemic of la grippe, very severe and painful, spread through the country, and again many pupils were laid up for a while.

Twice it became necessary to allow some parents to take home their children for two or three weeks.

Since March 15 the general health has been slowly improving. As Wikwemikong is habitually a very healthy place, we hope that at the opening of class next August, our young people will be again in good spirits and in excellent condition to resume the work of their education.

Water Supply.—A windmill and a large tank erected two years ago supply the water necessary to the whole institution. They constitute also the principal protection against fire. Besides we have ten Star fire-extinguishers, five fireman's axes, and buckets full of sand against lamp-explosions.

Heating.—Both schools are heated with box-stoves and kept quite comfortable.

Recreation.—Two hours daily, besides Saturday afternoon, are given exclusively to recreation. Both schools have good play-grounds, although small furnished with suitable games and gymnastic appliances. The boys' favourite game is football ; they also take much interest in gymnastic exercises. The girls like the swing better and other quieter amusements. They have also play-halls for rainy weather, winter and evening recreations.

I have, &c.,

G. A. ARTUS, S. J.,

Principal.

PROVINCE OF MANITOBA,
NORWAY HOUSE BOARDING SCHOOL,
NORWAY HOUSE—KEEWATIN,
BERENS RIVER P. O., July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my first report on the Norway House boarding school, for the year ended June 30, 1901.

Location.—The school is situate on the reserve at Rossville village and commands a fine view of the lake both south and west.

Land.—The area of land in connection with the school is not known.

Buildings.—The building is frame, built on a stone foundation, 46 x 100 feet, and is two stories high, with basement containing three cellars.

First floor.—This comprises ten rooms, one 14 x 14½ feet, used as principal's office, another, 14 x 14½ feet, used as a dining and sitting-room, also one 17½ x 15½ feet, used as a bed-room, girls' play-room, 29 x 14½ feet, boys' play-room, 29 x 29 feet, dining-room, 19 x 40 feet, assistant principal's room, 15½ x 11½ feet, kitchen, 15½ x 39½ feet, two store-rooms, one 18 x 15½ feet, and the other 15½ x 11½ feet.

Second floor.—This consists of five rooms, one 30 x 30 feet, used for boys' dormitory, one 30 x 30 feet, used for girls' dormitory, two rooms, 18 x 10 feet, used by staff as bed-rooms, and one 19 x 21½ feet, used as sewing-room.

Outbuilding.—One built of logs, 15 x 15 feet, used as a store-room.

Stable.—One 9½ x 24 feet, used for cow stable.

Accommodation—There is accommodation for five members of staff and fifty-eight children.

Attendance.—The attendance is very satisfactory, our numbers varying from forty-six to fifty pupils, the whole year.

Class-room work.—The course of studies authorized by the department has been adhered to as much as possible, with the addition of singing at sight by note and also drawing.

Industries Taught.—Nearly all the general work required on the premises is performed by the pupils themselves. The boys cut the wood, carry all water needed, attend to the gardens, and assist in kitchen and also baking. The girls do plain and fancy sewing, dressmaking, baking, ironing, washing and other housework, also all the mending required to be done. Four girls can run the sewing-machine and four children are being taught music.

Garden.—Ground is being rapidly broken by the older boys themselves, and as fast as it is cleared will be used for growing produce for the school. There is about one and one-quarter acres cultivated for potatoes, and three-quarters of an acre also for small seeds. It is in contemplation to clear much more ground in the coming fall.

Moral and Religious Training.—Morning and evening prayers are held daily. On Sunday the pupils attend two services in the church, and also attend Sunday school every Sunday at 6.30 p.m.

Health of Pupils.—With the exception of one girl who died at the school, the health of the children has been wonderfully good.

Water Supply.—The school is situate close to the lake, from which a bountiful supply of good pure water is always to be obtained.

Fire Protection.—Four barrels are constantly kept filled with water, and also an ample supply of pails, axes and ladders close at hand.

Heating.—The building is heated throughout by two 'Economy' furnaces. The fuel used is wood.

Recreation.—The boys and girls engaged in the usual outdoor and indoor amusements. As music is one of their greatest attractions, a beautiful organ has been purchased and the closest attention will be paid to voice-culture, such as solo, part and chorus singing and singing in general. The children are kept in the open air as much as possible, and weather permitting bathe daily in the lake during the hot weather.

General Remarks.—This school is just now in its infancy so that at present too much cannot very well be expected of the children. This is the first boarding school established on Lake Winnipeg. I am glad to say the Indians to all appearance seem to have full confidence in the present staff of the school, and are thoroughly satisfied with the way in which their children are treated.

I have, &c.,

E. F. HARDIMAN,
Principal.

PROVINCE OF MANITOBA,
PINE CREEK BOARDING SCHOOL,
WINNIPEGOSIS P. O., July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report, as follows :—

Situation.—The Pine Creek boarding school is situated on the shore of Lake Winnipegosis, near the Pine Creek reserve. Winnipegosis is the nearest post office.

Land.—One hundred and sixty acres of land belong to the school. This land has been acquired as a homestead. Most of it is used as a pasture. Five acres are under crop.

Buildings.—The boarding school is one hundred and fifteen feet long by forty five feet wide. It has two stories, a basement and the attic. In this building we have the kitchen, refectory, dairy, cellar, wash-room, class-rooms, chapel, sewing-room and dormitories.

Accommodation.—There is accommodation for one hundred pupils, with the necessary staff.

Attendance.—The attendance during the past year was very good.

Class-room Work.—Most of the pupils are anxious to learn, and they do all in their power to meet with the wishes of their teacher.

Farm and Garden.—There are five acres under crop. Vegetables are the principal products.

Industries Taught.—The girls are taught cooking, sewing, knitting, washing, dairying and the care of poultry. The boys are taught the care of cattle and horses, and also farming.

Moral and Religious Training.—Half an hour is devoted each day to the moral and religious training of the pupils.

Health.—The children are all enjoying good health.

Water Supply.—The water-supply is obtained from the river by means of a pump.

Fire Protection.—There are only two fire-extinguishers at the school, as a protection against fire.

Heating and Lighting.—The house is heated by steam and lighted with oil lamps.

I have, &c.,

A. CHAUMONT,
Principal.

PROVINCE OF MANITOBA,
PORTAGE LA PRAIRIE BOARDING SCHOOL,
PORTAGE LA PRAIRIE, July 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—This school is situated about a quarter of a mile east of the town of Portage la Prairie.

Land.—In connection with the school, there are two acres of land, divided into the following : vegetable garden, flower garden, and two play-grounds, one for the girls and one for the boys.

Building.—The building is of frame, on a stone foundation.

Attendance.—The class-room attendance is regular, the pupils being all boarders. The progress made by the children has been encouraging ; some have done remarkably well. Music, both vocal and instrumental, is a source of pleasure to the children, especially the girls.

Accommodation.—There is ample accommodation for forty children.

Industrial Work.—The girls are trained in habits of neatness and industry in the kitchen, laundry, and in all other departments of household work.

The boys are taught to work as much as possible, cutting wood, gardening, carpentry, and such work as they are able to do.

Moral and Religious Training.—An hour in the morning is devoted to religious teaching, and also one in the evening. One of the boys (Angus Mackay) received a beautiful Bible from the superintendent of the Presbyterian Sunday school for regular attendance and for knowing the greatest number of memory verses. The conduct of the pupils has been very satisfactory.

Health and Sanitary Condition.—The general health of the pupils has been fairly good, but a few, who were suffering from tubercular affection, were discharged by the department. Two of the number, a boy and a girl, died at their homes a short time ago.

Water Supply.—There is a good well, amply sufficient for our needs, and one soft water tank in the basement.

Fire Protection.—The school is more or less provided with fire-appliances, such as fire-extinguishers, tank, pumps, two small chemicals, one axe and one ladder.

Heating and Lighting.—The building is heated by hot air, and lighted by electricity.

Recreation.—The girls have many games in their own play-ground, also walks, accompanied by some one. The boys have athletic sports. Football seems their most popular game during the summer months. In winter, skating and hockey is the principal pastime for the boys. The girls also enjoy skating in winter.

I have, &c.,

ANNIE FRASER,
Principal.

PROVINCE OF MANITOBA,
RAT PORTAGE BOARDING SCHOOL,
RAT PORTAGE, ONT., July 2, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report on the Rat Portage boarding school for the year ended June 30, 1901.

Location.—This school is situated south of the town of Rat Portage on the shores of the Lake of the Woods, and is distant about two miles from the Canadian Pacific railway station.

Communication with the town of Rat Portage is mainly by water in summer, as a deep inlet separates the property from the town limits. The shore around is mostly abrupt and high, but the school is on a terrace-like incline, and the eye is regaled with charming scenery during the summer season.

The school is under the auspices of the Roman Catholic Church, and is placed under the patronage of St. Anthony of Padua.

Land.—There are fifty acres of land in connection with this school, the property of the Roman Catholic mission. It is properly described as subdivision 1-8, township of Jaffray.

Much of the land is rock, but fertile strips stretch out here and there, and furnish sufficient soil for gardening purposes.

Buildings.—The school buildings are of frame construction with brick veneer. The foundations are of stone. The interior is plaster-finish, except the ceilings, which are of wood. The main building is 36 x 30 feet, three stories high, with an extension at the south end 36 x 26 feet, two stories high. Besides there is a lean-to- kitchen, attached to the rear of the main building, 16 x 14 feet.

The other buildings are : cottage, 20 x 16 feet, with lean-to, 14 x 12 feet, resting on stone foundation. It contains a hall and three rooms, and is the principal's residence.

Work-shop, 22 x 16 feet, with stone foundation.

Stable and carriage shed under one roof, 46 x 18 feet.

Wood-shed, 20 x 12 feet.

Log house, 18 x 14 feet, for the use of visiting Indians.

A new building, measuring 48 x 18 feet, has been put up during the year. It is a frame building on stone foundation. A partition divides it into two equal parts,

one of which serves as laundry and the other as storehouse. The laundry is equipped with two laundry boilers of a capacity of forty-five and thirty gallons respectively. A stairway leads from the laundry to the loft, which is disposed the full length of the building for a drying-room.

Accommodation.—There is accommodation for thirty-five children and a staff of five, distributed as follows: girls' dormitory on upper flat of main building, 36 x 30 feet, less apartment for assistant matron. On second floor are : sewing-room, girls' recreation-room, and Sisters' private apartments, four rooms in all.

The ground floor comprises : hall, office, private dining-room, children's dining-room and pantry.

The extension has three rooms on the first floor, viz. : class-room, chapel and boys' play-hall. The upper flat of extension is the boys' dormitory, 36 x 26 feet, including room for monitor.

The house is well furnished on the whole, the dormitories have iron beds, and the class-room is well equipped. There being only one class-room available, it is necessary to take the boys and girls to class at alternate hours.

Attendance.—The register shows an attendance of thirty children (the number allowed by the department), but the actual attendance is somewhat in excess of that number.

Class Work.—The class work extends over the three standards. Great pains are taken to explain the lessons to the children and to teach them to converse in English. The boys are particularly successful in English.

Farm and Garden.—Three acres of land are at present under cultivation for garden purposes and very satisfactory results are obtained.

Industries Taught.—The garden furnishes considerable occupation to the boys during the summer season. They are taught the art of preparing the soil, of planting and tending to plants. The winter work is mainly limited to providing wood and water. The girls are trained in the art of general housekeeping ; also in laundry work, sewing, cooking and baking.

Moral and Religious Training.—As is proper, the moral and religious training of the children receives special care ; it is also our main source of consolation. Respect for authority and obedience is continually inculcated and insisted upon. A certain time every day is devoted to Christian doctrine, and morning and evening prayers are attended in the chapel.

Health and Sanitary Condition.—The general health has been very good this year. One case of pulmonary affection and a few cases of scrofulous disorders are causing us some alarm.

The food supply is wholesome and abundant. Besides the three regular meals, the children are given a substantial lunch in the afternoon.

Cleanliness of person is insisted upon, and ventilation is well attended to.

Water Supply.—The water is supplied from the lake, and is hauled to the house by horse and cart. It is not very good during the hot season.

Fire Protection.—Three Dominion fire-extinguishers have been purchased and placed at convenient places on the different flats.

Ladders are also at hand. There are practically two exits from every part of the house.

Heating.—The building is heated by two furnaces, which give satisfaction. There is also a box-stove in the boys' hall.

Recreation.—One hour is allowed for recreation at noon and the same in the evening. In summer an extra half hour is granted in the evening. Skating and coasting are the boys' principal amusements in winter. Bathing and boating are the favourite pastimes during the summer season.

General Remarks.—I beg to acknowledge the courtesy of our inspector, Mr. J. A. Leveque, in all our dealings with him, and to thank him for the interest he takes in the school.

I may remark that the girls who were somewhat backward in English conversation, have made noted progress during the year. In general there has been a better spirit in the school for the last year ; desertions are a thing of the past, and children are happy and contented here. We have ceased allowing them to go home during the holidays and find that it saves us a deal of trouble.

I have, &c.,

CHAS. CAHILL, O.M.I.,

Principal.

PROVINCE OF MANITOBA,
BRANDON INDUSTRIAL SCHOOL,
BRANDON, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The Brandon industrial school is situated three miles northwest of the city of Brandon, about the centre of the hill that once formed the bank of the Assiniboine river. We are greatly favoured in having the experimental farm adjacent to us on the east, and the view looking over the fertile valley toward the city of Brandon is a beautiful one.

Land.—We have three hundred and twenty acres of land belonging to the school.

Buildings.—The main building, principal's residence, farmer's residence, gardener's residence, barn and stables, carpenter's shop, ice-house, and two root-houses comprise the buildings at the school.

Accommodation.—There is ample accommodation for one hundred and twenty-five pupils and all the members of the staff.

Attendance.—The average attendance has been one hundred and three, and the attendance in the school-room and on duty has been regular.

Class-room Work.—All the pupils attend school for three hours, and many of standards I and II for six hours per day, and during the year progress has been fair. All pupils are on duty on Saturday forenoon ; the afternoon is used as a preparation day for the Sabbath. The programme of studies authorized by the department is adhered to. The pupils are graded as follows :—

	Pupils.
Standard I.	6
" II.	42
" III.	29
" IV.	26

We have a singing class every week, led by a qualified teacher from Brandon.

Farm and Garden.—Farming and gardening are considered the most important industries. We have under cultivation one hundred and thirty-seven acres, with the promise of an abundant harvest. The acreage under cultivation is as follows :—

Wheat, thirteen acres ; oats, thirty-six acres ; barley, five acres ; brome grass, five acres ; rye grass, eight acres ; corn, seven acres ; potatoes, eight acres ; mangolds,

two acres ; turnips, three acres ; garden, five acres ; summer-fallow, fifteen acres ; breaking, sixteen acres ; and meadow, fourteen acres.

The remaining one hundred and eighty-three acres comprise pasture and uncultivated land.

Industries Taught.—The boys are taught farm, garden, carpenter-work ; and other handicrafts are taught as well as possible to enable a boy to suit himself to his environment when he leaves the school. Girls are taught sewing, cooking, laundry and all useful branches of household duties. Quality of work is insisted on rather than quantity.

Moral and Religious Training.—Devotional services are conducted every morning and evening. There is a special class every Monday evening, in which the pupils take an active part ; Sabbath school each Sunday afternoon, where all the members of the staff are teachers ; preaching service every Sunday evening. All our boys, and as many of the girls as we can take, attend the Sunday morning service in Brandon. In all of these services we endeavour to inculcate the principles of true morality and the Christian religion.

Health and Sanitary Condition.—We have to report three deaths during the year, and two of the pupils have been sent home on account of ill health. We have now one serious case of pneumonia ; scrofula has shown itself in two or three cases ; otherwise the general health, especially of the boys, has been excellent.

The building is well lighted by electricity, well ventilated, and the drainage is good. Careful study and attention is given to the practice of the rules and conditions of good health. An abundant use of vegetables, wholesome food, cleanliness of person and premises, together with outdoor exercise, all prove conducive to health.

The attendance of Dr. Fraser, the physician in charge, is always available at our call. A graduate nurse permanently on the staff is hoped for in the near future.

Water Supply.—Abundance of good pure spring water from the well on the hillside is pumped by a windmill into two large tanks on the top flat, and from these water is supplied to all parts of the building.

Fire Protection.—Some small chemical fire-extinguishers are kept for use. Our main protection is a large McRobie engine in the basement, with a drum on each flat, with sufficient hose to reach all points of the same. Hose to our water-works, and pails at convenient points, are kept full of water. We have also two fire-escapes, providing a means of exit from all four dormitories.

Heating.—The whole building is heated by hot air. Three large wood furnaces (two of them Smead-Dowd have been converted into an ordinary furnace system), and two coal furnaces, with an excellent apparatus, constructed according to the most modern principles that govern heating with hot air, keep the building in a comfortable condition all winter through. Our fuel bill has been a trifle less than $1,000, so we can say our heating system is very satisfactory.

Recreation.—Indoor games consist of checkers, forte, crokinole, Indian clubs, and dumb-bells, while the favourite games outside are football, skating, sleighing, baseball and croquet. Our school programme is so arranged that each boy and girl can have a roam with their teacher a half day during each month.

General Remarks.—In all our training and teaching we seek the best interest of the children, and in every department such methods are adopted as will best fit the boy or girl for the circumstances that may surround them when they graduate from the school. The atmosphere of the school is made as home-like as possible, and with the aid of a properly qualified and efficient staff, we are endeavouring to make the school a success.

About one thousand visitors from all parts of the world have signed the roll, which is only about one-fourth of those who have visited the school during the year.

Before closing this report, I wish to express my gratitude to the various officials of the Indian Department, and the Missionary Society of the Methodist Church, for their uniform courtesy and kindly spirit shown and expressed to the principal of this institution during the year.

I have, &c.,

T. FERRIER,
Principal.

PROVINCE OF MANITOBA,
ELKHORN INDUSTRIAL SCHOOL,
ELKHORN, July 26, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I herewith have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The new home, which we have occupied since September 7, 1899, is situated about one-quarter of a mile from the town of Elkhorn, and stands in about the centre of what was formerly known as the 'Gore,' a level piece of excellent turf, some forty-two acres in extent, bounded on the north by the Canadian Pacific railway main line, on the south by the public road allowance. West of this, and immediately adjoining it, lies our farm of three hundred and twenty acres, being the southwest quarter of section four, and southeast quarter of section five, township twelve, range twenty-eight, which contains excellent pasturage and wheat land. This land is owned by the Dominion government.

Buildings.—These comprise the main building, laundry and gymnasium, which latter contains the carpenter, paint and boot shop, having been fitted up in the month of August, 1900, horse and cow stables, coal shed, boys' and girls' outhouses. There is also a small frame building covering the pump and sewage tank. Connected with this is a windmill used in emptying the tank, which was placed in position this spring.

The department erected during the year a substantial root-house, 14½ x 60 feet, which gives ample storage for all the roots and vegetables grown on the farm.

Accommodation.—There is accommodation in the school for one hundred pupils, and fifteen of a staff.

Attendance.—There has been an increase in the attendance over last year, although our number is not yet as large as in former years.

Class-room Work.—In this department the work is most satisfactory. In standards IV and V there has been remarkable progress. Miss Marks is to be congratulated on the work done by the pupils. I feel that I must make particular mention of two essays : 'Victoria the Good,' written on the occasion of our beloved Queen's death, by Agnes Flett, of St. Peter's, and the other 'The Elkhorn Industrial School,' by Samuel Pratt, of Touchwood Hills ; in both, the style and composition are very clever. At the promotion examinations in June, the average marks were high, and the papers were by no means easy, the work done being in advance of the curriculum.

Farm and Garden.—The acreage this year under crop is as follows :—wheat, fifty-five acres ; oats, twenty-five acres ; vegetable garden, seven acres ; summer fallow, seventy-three acres ; of the remaining portion of land about one hundred and thirty acres is inclosed for pasturage and the rest uncultivated. All the work

of preparing the land, cultivating and seeding, was done by the pupils under the supervision of Mr. Smith, farm instructor.

Industries Taught.—The boys are instructed in carpentry, boot-making, baking, farming and gardening. A number are kept constantly employed in general choring about the institution and improving the grounds.

The girls are taught sewing, knitting and dressmaking by Miss Dicken, a competant dressmaker, who has been a member of the staff for a number of years. They perform all the necessary household duties, and are instructed in cooking and laundry work, in all of which they show great aptitude, proving that they are as capable of learning as girls of our own race.

Moral and Religious Training.—Prayers are held morning and evening in the school-room. On Sunday the children attend St. Mark's church. Sunday school is held in the institution for the junior pupils, the seniors attending St. Mark's Sunday school. There is also a junior and senior Bible class conducted weekly. A number of the pupils are communicants, all of whom take considerable interest in their religious training. The conduct of the children during the year has been very good. Punishments have been of rare occurrence, and no serious offences have been committed. Both boys and girls have their time fully taken up with either work or play, and thus the main incentive to wrong-doing is done away with.

Health and Sanitary Condition.—During the year the health of the pupils has been satisfactory. I am again thankful to say that only one death occurred in the institution during the year. The sanitary arrangements are excellent. There is a large tank at considerable distance from the main building, into which the sewage is carried from the bath-rooms, kitchen and laundry ; this is pumped out with the windmill on the open prairie. The outhouses for boys and girls are erected at a safe distance from the school building, so that any danger from defective sanitation is removed.

Water Supply.—The water-supply at the school is excellent and free from alkaline substances. A hot-air Ryder engine pumps our supply into a tank on the top flat.

Fire Protection.—All fire-appliances are in good order ; the McRobie fire-extinguisher is placed in the building. Besides this there are a number of patent fire-extinguishers and fire-axes.

Heating and Lighting.—The heating is done by a system of hot water. The department is now having a lighting plant placed in the school.

Recreation.—All athletic sports are encouraged. Football is the most popular game in summer. Our boys feel much elated over their winning the 'Middleton Cup' for this year. In winter they have the large gymnasium, with swings and horizontal bars, from which they derive much pleasure. In summer the girls have swings, croquet and tennis and take long walks with some member of the staff. Skating is the chief amusement in the winter.

General Remarks.—This year has been one of steady progress and satisfactory work, and the prospects for the future are most promising. In August, the Hon. David Laird, Commissioner of Indian Affairs, visited the school. He made a careful inspection, giving special attention to the financial affairs, which have now been placed on a thoroughly satisfactory basis.

In September, the meeting of the Rural Deanery of Brandon was held in Elkhorn. A number of clergymen were present ; they were one and all delighted with the school.

The Rev. C. N. F. Jeffery, Secretary of the Synod and General Missionary for the Diocese of Rupert's Land, said in his remarks on the school : 'I cannot but feel deeply thankful that these children of our Indians are so well provided for, both spiritually and temporally, and that such facilities for self-improvement are theirs as are afforded to them in this splendid home under its capable management.'

On the first aniversary of the opening, September 7, a missionary meeting was held in the school. The speakers were the Rev. McAdam Harding, Rural Dean of Brandon ; Rev. J. W. Hodgins, of Seaforth, Ont. ; Rev. C. N. F. Jeffery, of Winnipeg, and Rev. Mr. Eaton, incumbent of St. Mark's parish. There was a large attendance of townspeople, and the meeting was most successful.

In October, the Hon. James Smart, Deputy Minister of Indian Affairs, and Mr. E. F. Stephenson, visited the school. They were much pleased with the institution generally.

A reception was held at the school in honour of the soldiers of our locality who had returned from South Africa. The main entrance and dining-hall were very prettily decorated with flags, streamers, appropriate pictures and mottoes, making the room look particularly bright and atractive. At about eight o'clock p.m., a large number of people from the town and surrounding country assembled in our spacious dining-hall, where an interesting programme was rendered. The soldiers were most enthusiastically received by the pupils and visitors singing 'The Soldiers of the Queen.' After which short addresses of welcome were made by some of our leading citizens, which were followed by very interesting speeches by the guests of the evening, describing their experiences while at the front. At ten o'clock the entertainment, which was most enjoyable throughout, was brought to a close by the singing of the National Anthem.

The event of the year was the visit of the Hon. Mr. Sifton, with regard to which the Manitoba *Free Press* of October 29 says: 'Mr. Sifton visited the industrial school in Elkhorn on Saturday, and after receiving a most cordial reception from the staff and pupils, he was presented with a kindly-worded address, accompanied by a bouquet. The honourable gentleman spoke nicely to the children in reply, thanking them for their tokens of esteem and encouraging them to prosecute their studies diligently. He was highly pleased with the work being accomplished there. Mr. and Mrs. Wilson entertained him at lunch after the inspection was completed. The school is an admirably equipped institution, and the work being accompalished there, both in mental and physical training of the pupils, is indeed creditable.'

It is to the Superintendent General our very grateful thanks are due, as it is owing to his desire to further the work that the present adequate and efficient means have been provided.

We have a competent and reliable staff, all of whom take a deep interest in the welfare of our Indian wards and are striving in every way for the up-lifting of this race, for whom our government is doing so much.

There have been trials and difficulties with which to contend ; but through all there has been the knowledge of the loving care of the Great All Father, and to Him do we ascribe the honour and praise for the blessings vouchsafed during another year.

I have, &c.,

A. E. WILSON,
Principal.

PROVINCE OF MANITOBA,
RUPERTS LAND INDUSTRIAL SCHOOL,
MIDDLECHURCH, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report for the year ended June 30, 1901.

Location.—The school is situated about seven miles from the city of Winnipeg and about twenty miles from the St. Peter's reserve.

Land.—The farm consists of about four hundred acres of land, being lot No. 18, in the parish of St. Paul. The land was purchased by the Dominion government, which is now the owner of the same. About three hundred acres are well adapted for grain-growing purposes, the soil being of a splendid quality of black loam ; the rest of the farm is admirably adapted for hay-land and grazing purposes.

Buildings.—The main building is of white brick, on a stone foundation, three stories high, with a basement. During the year a new laundry twenty feet by thirty has been built, and an engine and dynamo-house twelve feet by sixteen. The buildings are all in good repair and most of the frame buildings have recently been repainted.

Accommodation.—There is at present, accommodation for one hundred and twenty-five pupils and eighteen of a staff. This can be considerably increased when the principal's residence, which is in course of erection, is completed.

Attendance.—The attendance has been up to the full capacity, viz., one hundred and twenty-five, the whole year.

Class-room Work.—Special attention is devoted to the class-room. Two very competent teachers have charge of this department, and the regular public school work is adhered to—some of the older pupils being prepared for entrance examinations. An older pupil is also engaged teaching the younger children and those who do not understand English when they are admitted.

Several of our discharged pupils are now engaged teaching reserve schools and are apparently very successful.

Farm and Garden.—Last year our farm was not a success owing to the extreme drought and our garden was a total failure. This year we have one hundred and twenty-five acres sown, and present appearances indicate a very excellent crop. Our garden is good and prospects for an abundance of vegetables, roots and potatoes are favourable.

Industries Taught.—A good deal of attention has been given to the several industrial departments. Under competent instructors carpentering, blacksmithing, printing, tailoring, painting and glazing are taught the boys, and as a good deal of new work has been done and a great deal of repairing necessary, considerable progress has been made. The girls are instructed in dressmaking, knitting, darning, baking and other useful industries necessary to housekeeping. Several of our girls have got situations as servants in Winnipeg, and they are well spoken of as being peculiarly adapted as such, owing to the thorough training they receive in the various departments.

Moral and Religious Training.—Prayers are held morning and evening in the dining-room and religious instruction is given in the school-rooms daily. All the pupils attend St. Paul's church every Sunday at 11 a.m. and at 7. p.m. Sunday school

is held in the school at 2.30 p.m. every Sunday, where each member of the staff teaches a class and the Rev. R. C. Johnstone, incumbent of the parish, teaches the Bible class.

Health and Sanitary Condition.—The health of the pupils has been good. There has been no disease of a contagious nature and we have had no deaths during the year. We have been able to select healthy pupils for admission owing to the numerous applications we have had, and in this way, have been able to keep entirely free from scrofula and consumption.

Water Supply.—The water is obtained from an artesian well, and is pumped into tanks in the attic by a hot-air engine from which pipes run to the various parts of the building. There are also two good outside wells which are used for all outside purposes.

Fire Protection.—Large mains run through the building from a large tank in the attic, to which hose are attached, which reach to any part of the building We have also the McRobie fire-extinguishers, with hose attachment, on each floor. Hand-grenades are distributed throughout the building. Fire-axes and pails are conveniently situated in each room and dormitory .

Two fire-escapes from each floor are provided.

Heating and Lighting.—We recently installed an electric light plant, operated by a gasoline engine, with one hundred and twenty lights. This being the first plant of this kind in this country, there was some doubt as to its success ; but on account of the superior kind of engine, I find it works perfectly, not the slightest flicker being noticed in the light. It is somewhat more expensive than coal oil, but the safety and cleanliness more than compensate for this.

Recreation.—All kinds of games are played by the boys, such as football, base ball and cricket. The girls play tennis, croquet and basketball. Our principal recreation is drilling for the boys and calisthenics for the girls, both of which interest the pupils very much.

General Remarks.—Our school has been steadily progressing and we have done all we could to popularize it so as to make the children as happy and contented as possible. We have a band of thirty instruments, that provides music every evening, which they all enjoy, and our system of military drill, by the cadet corps, and calisthenics for the girls, as well as fancy marching for the smaller children, interest them very much, so that they rarely ask to go home. For the past two years we have taken the whole school for two weeks camping to one of the adjacent reserves, while the Indians were being paid their usual annuity. This has created a greater interest in the school by the parents, and has increased their anxiety to have their children educated, as has been evidenced by the number of parents who voluntarily bring their children and ask us to take them to school.

I have, &c.,

JAS. G. DAGG,
Principal.

PROVINCE OF MANITOBA,
ST. BONIFACE INDUSTRIAL SCHOOL,
ST. BONIFACE, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The St. Boniface industrial school is situated on the town site of St. Boniface, about half a mile from the town-hall, and two miles from the Winnipeg post office.

Land.—About forty acres is all the land belonging to the school ; this was offered to the department by the late Archbishop Tache, who had purchased it from the Sisters of Charity for this purpose by giving them in exchange a whole section of six hundred and forty acres, two miles from the present location of the school. It is to be regretted that the school was not built there in the first place, as then there would have been ample land for all purposes. Fifteen acres is all that can be put under cultivation, and it is not all in one piece, though with good drainage it would be well adapted for growing roots ; giving employment to the younger boys and those who are not strong enough for the ordinary farm work.

Buildings.—All the buildings with the exception of the pantry are in a good state of repair. The carpenter's shop and the laundry have been given a fresh coat of paint. A small addition, 12 x 10 x 10 feet, has been built to the side of the boys' band-room for a carbide-generator and storehouse for carbide. Two ventilators, eighteen-inch diameter, have been put in the dormitories, making a great improvement.

Accommodation.—There is sufficient space for one hundred and ten children, sixty boys and fifty girls. The only defect is in the dormitories where space is insufficient. There is no accommodation for the staff ; what is now used as a bed-room, is a class-room divided into three apartments ; the girls' infirmary is used by the lady teacher for the younger pupils, boys and girls.

Attendance.—The attendance has been poor, we have eighty-one on the register. Only seven new pupils have been admitted during the year, and one of them, being fifteen years old, remained only a few months, then ran away and was discharged owing to the fact that his parents being disreputable characters could not be kept away from the surroundings and were a cause of trouble. As it stands now, there is little hope of increasing our number ; unless means are used to secure recruits it will be impossible to keep this institution free from debt.

Class-room Work.—The pupils are in three class-rooms, bigger boys, bigger girls, and little ones, boys and girls. The progress in English is good, and we remark that the children like to speak English and therefore try to learn it.

Farm and Garden.—Owing to the drought the crop last year was very poor, except three hundred bushels of barley, and about five hundred bushels of potatoes. We could not procure sufficient hay, and had to send some of the cattle out for the winter. The garden also was not good for want of rain.

Industries Taught.—Eight boys are continually employed on the farm. If we had more suitable land for cultivation, more boys could be taught this very necessary industry. Four boys are kept busy in the carpenter's shop, repairing and doing necessary work around the buildings.

Moral and Religious Training.—Religious instruction is given every day in school, also morning and evening prayers ; on Sundays the pupils go twice to church, and the principal has Sunday school during the afternoon.

Health and Sanitary Condition.—The health generally speaking was good, except in those cases where children were predisposed to consumption. We have had no contagious diseases. The sanitary condition is very good.

Water Supply.—The water is good and plentiful, being pumped from a well under the house, and stored in great tanks at the top of the building.

Fire Protection.—We are well provided in case of fire, but I am happy to say we have never had occasion to use our appliances, which are, the McRobie fire-apparatus with two hundred feet of one-inch rubber hose ; six Dominion fire-extinguishers ; six axes and twelve buckets.

Heating and Light.—Two hot-water furnaces are placed in the basement, heating the whole house and giving perfect satisfaction. For lighting we use acetylene gas and find it answers splendidly, very much superior to lamps—less work, cheaper, better light, and no danger.

Recreation.—For recreation we have two large recreation-halls and two play-grounds, separated ; where during play-time the children amuse themselves to their hearts' content ; boys with baseball, football, marbles, kites, putting the shot, running races ; in the winter they flood part of the play-ground, turning it into a capital skating rink. The girls are fond of playing ball, skipping, picking flowers, and other quiet amusements. During berry season they are often taken to the bush to gather the fruit—nothing gives them greater pleasure. The boys also have a very good band.

I have, &c.,
J. B. DORAIS,
Principal.

MANITOBA SUPERINTENDENCY,
RAT PORTAGE INSPECTORATE,
RAT PORTAGE, ONT., October 14, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of my inspection of the Indian schools in Couchiching, Rat Portage, and Savanne agencies, for the fiscal year ended June 30, 1901.

COUCHICHING AGENCY.

LONG SAULT DAY SCHOOL.

The Long Sault day school was inspected on July 20. It is in connection with the Church of England. Miss M. A. Johnson, teacher.

Attendance and Grading.—Number of pupils present, four girls ; number on roll, nine : boys, four ; girls, five, classified as follows : five in standard I, two in standard II, one in standard III, and one in standard IV.

Building.—The building was in good order and very clean.

Equipment.—The equipment and material were sufficient.

Industrial Work.—This consisted of sewing, and making their own dresses. Some good specimens of socks, dresses, pinafores, &c., were to be seen, which the pupils make for themselves.

General Remarks.—Miss Johnson visits the families when the pupils are absent, and also visits the sick. She is a graduate nurse, and is therefore able to render them good services.

There is a good fence around the school plot forming a large place for recreation. Miss Johnson has had several years experience teaching in public schools, and was doing splendid work among the Indian children.

Manitou Rapids Day School.

This school was inspected on July 20. It is in connection with the Church of England. Mr. John Jackson, who took charge of this school in May last, was sick at the time of my visit, and his home quarantined ; there were no pupils present for examination. The number of children of school age on the roll is twenty-two : boys, nine ; girls, thirteen. Progress was reported fair.

Building.—The building was in good repair and clean. The fence surrounding the school plot is decaying, and instructions were given for its repair.

Equipment.—The equipment and material were sufficient.

Little Forks Day School.

This school was inspected on July 23. It is in connection with the Church of England. Mr. D. W. Wood, formerly of the Manitou school, is teacher.

Attendance and Grading.—Number of pupils present, seven : boys, four ; girls, three. Number enrolled, thirteen, classified as follows : eight in standard I, two in stanard II, and three in standard III.

Building and Grounds.—The building was in good order and very clean, also the surroundings. There is a fine garden between the school and the teacher's dwelling.

Equipment.—The equipment and material were sufficient.

Industrial Work.—Mrs. Wood has a class of knitting and sewing.

General Remarks.—The pupils were clean and fairly well dressed. Mr. Wood is doing good work, and the children were making fair progress. The teacher had only been in charge since last spring, and was likely to make a fair succes of this school, if the parents could be prevailed upon to send their children to school.

Couchiching Day School.

This school was inspected on July 25. It is in connection with the Roman Catholic Church. Mr. J. H. Dubois, teacher.

Attendance and Grading.—Number of pupils present, twenty-four : boys, eleven; girls, fifteen, classified as follows : seventeen in standard I, five in standard II, two in standard III.

Building.—The building is old and uncomfortable. Plans and logs and other lumber were prepared for a new building.

Equipment.—The equipment and material were sufficient.

General Remarks.—Mr. Dubois visits the families when the pupils are absent. He is a painstaking teacher. He took charge of this school last fall, having before taught in the St. Boniface industrial school, Manitoba, and the children were doing very well under his tuition.

RAT PORTAGE AGENCY.

Rat Portage Boarding School.

This school was inspected on February 18 and June 19, 1901, and visited on several occasions during the year. This institution is in connection with the Roman Catholic Church.

Staff.—Rev. Charles Cahill, O.M.I., principal ; Rev. Sisters Marie Christin, matron ; Ste. Lucie, seamstress ; McQuirk, teacher, and Maria, cook ; St. Paulus, monitor and gardener.

Grading of Pupils.—The number of pupils present was twenty-eight : boys, nine ; girls, nineteen. Number on roll, thirty, two being at service. The classification was : twenty in standard I, five in standard II, and five in standard III.

Buildings.—The school building is a suitable one. The whole place was in perfect order, and the dormitories, kitchen, dining-room, cellar and stores were models of cleanliness. The garden was a feature of the school, and a fair crop was expected therefrom, but unfortunately a hail-storm that passed over the place later on did considerable damage.

Outbuildings.—These buildings are in good order. Not far from the dwelling-house, a frame building on stone foundation has been erected, forty-eight feet by eighteen feet, which contains a laundry and two storehouses. The laundry, twenty-three feet six inches by seventeen feet six inches, is well fitted up for the intended purpose with boilers and tubs, and the attic the full length, with the necessary apparatus for drying purposes. The storehouse rooms are of the following dimensions : eight feet by seventeen and a half feet and fifteen feet ten inches by seventeen feet six inches, well lighted, and provided with proper shelves and drawers. A girls' closet, eight by five feet, has also been erected.

Industries Taught.—Gardening, and the care of stock and poultry are taught, under a competent instructor, and the big boys display much interest in these industries. The girls are taught dairy work and baking, sewing, cutting out, making and mending clothes, cooking, washing and general housework.

Class Work.—The class work has been attended with fair progress, and the result of the examination moderately satisfactory and encouraging, inasmuch as an improvement is indicated. The school-room should be enlarged, as at present it is too small for the full class.

Conduct and Discipline.—The conduct of the pupils is very satisfactory, and as there is a regular system of discipline, there is no trouble in maintaining order.

Islington Day School.

This school was inspected on September 7, 1901. It is in connection with the Church of England. Mr. J. S. Newton is teacher and catechist.

Attendance and Grading.—The number of pupils present was seventeen, boys ten, girls seven. Number on roll twenty-two, classified as follows : eighteen in standard I, and four in standard II.

Building.—The building is old and uncomfortable. The walls for a new one have been erected, and all the necessary lumber, shingles, &c., for its completion will be purchased and shipped this coming fall.

Equipment.—The equipment and material were sufficient.

Class Work.—The teacher has had several years' experience, and was doing fairly good work. The children were a bright lot of boys and girls, well dressed and clean. The attendance is better in the winter than in summer, berrying-picking taking families away and of course the children have to go too.

SAVANNE AGENCY.

Wabigoon Day School.

This school was inspected on August 17, 1901. Mrs. Amy Johns is the teacher.

Attendance and Grading.—Number of pupils present, nineteen—boys nine, girls ten. Number enrolled, twenty-six, classified as follows : eleven in standard I, fifteen in standard II.

Building.—The school-house was in good repair and clean, equipment and material sufficient.

Class Work.—The examination was satisfactory, good faithful work being done. The pupils were comfortably dressed and clean. Chief Shabaquay attended the examination and seemed interested and pleased ; he said he would do all he could to make the children attend regularly.

General Remarks.—Mrs. Amy Johns has now had several years' experience in teaching in this school, and continued doing splendid work among the Indians of this reserve.

Frenchman's Head Day School.

This school was inspected on August 22, 1901. It is under the auspices of the Church of England. Mr. James Fox is teacher and catechist.

Attendance and Grading.—Number of pupils present, twenty-one—boys, fourteen, girls, seven. Number on roll, twenty-two, classified as follows : twenty in standard I, two in standard II.

Building.—The building is a new one, built of logs and clapboards, and was in good order and clean.

Equipment.—The equipment and material were sufficient.

Class Work.—The work in the school is efficiently performed, and the pupils showed a fair knowledge of the subjects taught and laid down in the programme of studies.

Canoe River Day School.

This school is on the Lac Seul reserve. It was inspected on August 23, 1901. The school is under the auspices of the Church of England, Mr. Louis de la Ronde is teacher. He is a half-breed and former pupil of the Battleford industrial school.

Attendance and Grading.—Number of pupils present, seventeen—boys, six, girls, eleven ; number on roll, twenty, classified as follows : eleven in standard I, nine in standard II.

Building and Grounds.—The building is in good repair and clean. A fence has been placed around the building and the teacher's dwelling by himself. There was no garden, but one will be prepared for next year.

Equipment.—School materials and equipment are sufficient.

Class Work.—The work of the school is efficiently performed. The teacher, although young, is full of energy, and the pupils show a fair knowledge of the subjects taught.

Treaty Point Day School.

This school is also on Lac Seul reserve. It was examined on August 26, 1901. This school is also under the auspices of the Church of England. Rev. Thomas Pritchard is resident missionary and teacher.

Attendance and Grading.—Number of pupils present, thirty-one—boys, sixteen, girls, fifteen. Number on roll, thirty-one, classified as follows : eighteen in standard I, ten in standard II, and three in standard III. The attendance is better in summer than in winter when all the Indians are at home from their winter hunt.

Building.—The school-house was in fairly good repair, and equipment and material was sufficient, only a few items being asked for.

Class Work.—The pupils were clean, and the teacher was doing his best to bring them forward and was meeting with fair success. Some of his pupils have been transferred to the St. Paul's industrial school.

Eagle Lake Day School.

This school was inspected on September 11, 1901. Mr. A. J. Bruce is teacher.

Attendance and Grading.—Number of children present, eleven—boys, six, girls, five. Number on roll, fourteen, classified as follows : eight in standard I, six in standard II.

Building.—The school building is in a fair state of repair.

Equipment.—School material was sufficient; some improvements in the schoolroom which would add to the comfort of the place were suggested and reported to the Commissioner

General Remarks.

The several teachers of the day schools throughout this inspectorate are loud in their complaints that the Indians as usual take their families with them whenever they go to fish, hunt or visiting, and in consequence the average attendance of pupils is not as large as it should be, and therefore it is impossible to make any satisfactory progress under such circumstances.

I have, &c.,

L. J. ARTHUR LEVEQUE,
Inspector of Indian Agencies.

Northwest Superintendency,
Birtle Boarding School,
Birtle, Man., July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I beg leave to submit my annual report on the Birtle boarding school for the year ended June 30, 1901.

Location.—The Birtle school is situated on the north bank of the Birdtail creek, and is within the limits of the town of Birtle, in the province of Manitoba.

Land.—There are twenty-five acres of land belonging to the school and twenty-five acres of rented land. This land is all in one block and is fenced all around. About five acres are suitable for cultivation ; the rest is only suitable for pasture.

Buildings.—The school is a large three-story stone building. The barn is frame, upon a stone foundation. The hen-house is frame, and the milk-house made of logs.

Accommodation.—The school is large enough to accommodate sixty pupils including staff.

Attendance.—The attendance during the year was very good, there being an average attendance of about forty-three.

Class-room Work.—The pupils are classified as follows :—

Standard	IV.	4 pupils.
"	III.	12 "
"	II.	6 "
"	I.	5 "
Class	2	4 "
"	1	14 "

The average attendance in the class-room was thirty-five. All the subjects on the programme of studies were taught more or less. Most stress, however, was laid upon the acquisition of the English language.

Garden.—About five acres are under cultivation as a garden, in which were grown sufficient vegetables for the use of the school, besides turnips and mangolds enough to fatten three or four head of cattle.

The bigger boys with the help of a hired man do all of the gardening.

Industries Taught.—The girls are taught tailoring, dressmaking, knitting, cooking, baking, washing and ironing. The boys are taught gardening, care of stock and carpentering.

Moral and Religious Training.—The children are taught morals chiefly by frequent reference to, and explanation of, the Ten Commandments. The religious training consists of regular daily instruction in the Bible, the memorizing of verses, and catechism, and regular attendance upon the Sabbath services in the Presbyterian church of the town of Birtle.

Health and Sanitary Condition.—The health of the children during the year has been exceptionally good, there being no serious sickness whatever. Owing to the splendid situation of the school, upon a high elevation, the sanitary condition could not be better.

Water Supply.—We have not, as yet, been able to get water at the school, although several trials have been made. We expect to have the government drill, some time this summer, to make another trial. At the present time, the drinking water is drawn from the town spring. This spring supplies the whole town and is excellent water.

Fire-Protection.—Our fire-protection consists of four chemical fire-extinguishers, one dozen fire-pails, two long ladders and one force-pump in the cistern outside.

Heating and Lighting.—The building is heated by three large hot-air furnaces, and is lighted with coal oil lamps.

Recreation.—In the winter most of the children go to the skating rink twice a week, and in the summer the boys play football and the girls have skipping.

I have, &c.,

W. J. SMALL,
Principal.

NORTHWEST TERRITORIES,
ST. JOHN'S HOMES, BLACKFOOT RESERVE,
GLEICHEN, ALTA., September 11, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of the St. John's homes on this reserve, in charge of myself as agent of the Church Missionary Society, and to acknowledge the substantial government aid received by us during the past year.

Location.—The homes are situated at the north and south reserves, about ten miles apart, and within a few yards of the Bow river in each case. That at the north reserve (known as Old Sun's school) is almost in the centre of the largest village, and about four miles from Gleichen, on the Canadian Pacific railway. The school at the south reserve (known as White Eagle's) has—with the exception of two or three shacks—no village near it. In each case a few acres of land have been fenced off near the buildings, portions of which are under cultivation. The post office in each case is Gleichen.

Buildings and Accommodation.—Old Sun's school comprises two good-sized buildings—the boarding school itself and a school-house. The former is a large, commodious building, capable of accommodating thirty pupils (not fifty, as previously stated in error). It is for girls only. It consists of two wings, connected by the dining-room and kitchen on the ground floor, and by a staff bed-room and a sewing-room between the dormitories. The whole is lathed and plastered, and the exposed woodwork painted throughout, making it warm and cleanly. In addition to staff accommodation, there are day-rooms, lavatory, store-rooms and pantry, and two small cellars. The school-house is well constructed and capable of accommodating fully twice as many children as the home itself. It is heated by a hot-air furnace, and is well ventilated. Behind the home is a frame-built laundry, containing well and pump, a cook-stove, stand and tubs for washing, and a brick chimney. The building is connected with the home by a wooden sidewalk.

At the south reserve the home is a large and commodious building, capable of accommodating about fifty boys. It is a frame building, the dormitories of which are plastered, but the ground floor is unplastered and bitterly cold in winter. The building was erected by request of the Indians there, who appealed to the Superintendent General in person to see that one was erected there. The large school-room is under the same roof as the boarding school itself. The whole is heated by a large hot-air furnace and several stoves.

Attendance.—The number of children on the roll at the close of the fiscal year was sixteen girls at Old Sun's boarding school and twenty-five boys at White Eagle's boarding school. There are many more children of school age in the vicinity of these schools than these buildings could accommodate, and we long to see them rescued from the ill effects of the camp life.

Class-room Work.—The children have continued to give great satisfaction in their studies and in conversational English. During the year four of the boys have been advanced to the fourth standard.

Industrial Work.—Apart from the routine work of the institutions, both the girls and boys are given definite instruction in household and farm duties, so as to make them useful men and women on leaving the homes. Both the boys and girls are taught milking and butter-making, as well as bread-making. The boys find

plenty of scope for kitchen-garden work in the excellent gardens at the White Eagle's boarding school.

Moral and Religious Training.—Definite instruction is given daily, and everything is done to encourage a healthy Christian life. There has been no serious breach of discipline during the year, and the children have been well behaved and happy.

Health.—During the year we have lost one of our girls by death from tuberculosis. With this exception, the general health of the children has been good. The ample means provided for their medical care has no doubt contributed to this end.

Sanitary Condition.—This appears to be satisfactory.

Water Supply.—There is a good supply at both homes from wells supplied by the Bow river.

Fire Protection.—A number of fire-extinguishers and hand-grenades are placed in convenient places throughout the buildings, and buckets and tubs of water are kept where they can easily be got at in time of need. Axes are also kept ready for use. Fire-escapes, outside the buildings, are permanently connected with the dormitories, and are easily got at in case of need.

Heating.—The Old Sun's school is heated by stoves only, the school-house by hot-air furnace, and the White Eagle's school by furnace and stoves. Asbestos safes are in use.

Recreation.—Considerable attention is given to recreation, and the children are encouraged to be as much as possible in the open air. When indoors, they are taught to amuse themselves in various ways. We endeavour to oversee and guide their recreation.

I have, &c.,

H. W. GIBBON STOCKEN,
Principal and Missionary in Charge.

NORTHWEST TERRITORIES,
BLOOD C. E. BOARDING SCHOOL,
MACLEOD, ALTA., July 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report for the year ended June 30, 1901.

Location.—Our school is situated about thirteen miles south of Macleod, which is our post office. It is on an island directly opposite the Blood agency.

Land.—The land on which the school is built belongs to the Church Missionary Society, and consists of a quarter section, which is fenced. It is suited in part for crop-growing, and the rest makes fairly good pasture land.

Buildings.—We have quite a group of buildings, which are laid out in the form of a three-sided square. Commencing on the west side, north end, we have the girls' home. This building is about seventy feet by forty, having two stories. On the first floor are kitchen, staff sitting-room, dining-room, play-room, and wash-room, while above are three large dormitories, and five small rooms used as staff bed-rooms and clothes-rooms. Next south, with a space of some eighty feet, is the church and school. This building is some fifty feet by twenty-four, and has two divisions of movable doors. Again a space, and at the first corner is the stable with room for

four horses, and some six tons of hay in the loft. Lying in the rear are the cow-stables. Turning eastward, we have a small store, built since last report. It is about sixteen feet square. Then, in rear of it, in the boys' yard, is the laundry, this being about eighteen feet square. Again we come to the boys' home and mission-house. This building is about seventy by twenty-four feet, with two dormitories in rear. On the ground floor of boys' home are dining-room, play-room, and wash-room, while upstairs are two large and one small dormitories. Turning north on the east side, we have a small log building, used just now by some of the staff, and then we come to the hospital. This building is large, having two fine wards down-stairs, eighteen feet square, and also three small rooms for kitchen, medicine-room and bath-room and htree rooms upstairs for hospital staff. Since last year's report we have plastered the hospital. There is also a small building in rear of the girls' home, used as a carpenter's shop.

Accommodation.—We can accommodate some eighty children and eight members of staff.

Attendance.—Being a boarding school, the attendance is of course regular, and there has been much less home-going during the past year.

Class-room Work.—This, under our teacher, Miss Wells, progresses very well. Miss Wells holds a second-class certificate, and is in every way qualified for this work, which is showing in the rapid advancement of the children. Miss Wells takes great pains to see that no child is neglected, and has divided her school in such a way that all receive ample attention.

Farm and Garden.—This work is advancing. This year we have some four acres in garden, and ten acres in oats. Mr. Yeomans' untiring energy is largely responsible for this. He has been aided this year by Mr. Tisdale, a new addition to the staff. The children do some of the work, but owing to their house duties and school, we do not give them very much, as they, like Jack, if deprived altogether of play, become dull.

Industries Taught.—In my quarterly reports I always state that no industries are taught, for this is not an industrial school. At the same time, a school running with such a staff as we have cannot fail to teach much that might be classed as industries. Take the kitchen, under Mrs. Irvine, and see the girls. With one purposely put in charge each week, doing all the cooking for school and staff, learning to cook meats, vegetables and bread, also butter-making, and there is industry which Inspector Wadsworth has said 'reflects much credit on both teacher and pupils.' Then, the condition of the dormitories under Miss Denmark (girls) and Miss Sandfield (boys). Their tidiness and cleanliness, also the neatly-mended clothes, which the children do, and the washed garments—all speak of thought and time spent by these faithful matrons on their work. Mr. Yeomans, too, being a practical carpenter, is teaching many things in that line to the boys, as well as the proper care of the stock and stables.

Moral and Religious Training.—This takes the recognized form of morning and evening prayers and Sunday services, together with Sunday school conducted by the staff, but is carried on in an unofficial way by all of the staff. The children are gaining a thorough knowledge of the Bible and church-teaching, and are in some cases showing a decided wish for the power to live a good and moral life. But while camp life is as it is, with heathen dances and iniquities of all kinds abounding, it will be always difficult to accomplish anything like what we want.

Health and Sanitary Condition.—Owing to improved conditions in feeding vegetables and milk, in clothing, in boots, in general care and through the medical operations performed by Dr. Lafferty, we find the general health of the children a great deal better, but were they more frequently operated on (that is, when necessary), we feel that scrofula might become a thing of the past. The sanitary conditions are carefully looked after, nothing of a polluted nature being allowed to remain about

the place, and outbuildings being cleaned as necessary. There is no water system of drainage, which would of course be an improvement.

Water Supply.—This is taken from four wells, two being drive-pipe wells and two being dug, one drive-pipe being in the girls' home, and one in the hospital, while the dug wells are in the boys' yard and garden. The water is good throughout and plentiful.

Fire Protection.—This at present consists of buckets and grenades, pumps and axes, all kept in places convenient, but a grant has been made by the government which will improve this by adding force to the water.

Heating and Lighting.—The former is carried on by two furnaces and several stoves in the various buildings. Pipes are regularly inspected and cleaned, all precautions taken to insure safety and comfort. The lighting is poor and dangerous, oil lamps being used, but as many of these as possible are made fixtures.

Recreation.—This is thought of, though all being busy, a great deal of time cannot be given to it by the staff. However, football, baseball and clubs, cricket and croquet have from time to time been supplied to the children, together with swings, giant stride and horizontal bars. Walks are indulged in, and swimming and berry-picking in season prove of much pleasure and health to the children.

General Remarks.—In my estimation, a good advance has been made of an all-round nature during the past year. More could be made, were more done to draw the Indians living on the reserve from their evil ways, which reacts on the children, causing a continual desire to revert to their ways, and from a knowledge of what is going on around them. However, we one and all thank God for what has been accomplished, and with courage look forward to more advancement in the future.

I would also like to thank the government for grants kindly given. It would not be right to close without bearing record to the kind way our agent, Mr. Jas. Wilson, has throughout assisted us, whenever in his power so to do, by thought, word and deed, for by his help we have often been materially aided in dealing with these peculiar people, and have always found him most kind and considerate.

All of which is cheerfully submitted.

I have, &c.,

ARTHUR DEB. OWEN,
Principal.

NORTHWEST TERRITORIES,
BLOOD R. C. BOARDING SCHOOL,
BLOOD RESERVE, MACLEOD, ALTA., September 8, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this school for the fiscal year ended June 30 1901.

Location.—This school is located about twenty-four miles south of Macleod, and is one mile from the upper agency, within a few yards of the Belly river, on the Blood reserve. Address : Immaculate Conception Roman Catholic boarding school, Blood reserve, Macleod, Alta.

Land.—The land connected with the school belongs to the reserve.

Buildings.—The school building is divided into four parts. The main building has three stories. In the first story we have the dining-room, 17 x 30 feet ; the parlour, 17 x 13 feet ; and the office, the same size ; and a hall, 10 x 17 feet. In the second story is situated the chapel, 18 x 36 feet, and two rooms for the staff. The third story comprises a large room, 36 x 36 feet. At each end of the main building are the second and third parts, and connected with it, two good-sized buildings, 36 x 32 feet, with two stories each, and divided into two rooms. In the first story the school-room and the recreation-hall, 32 x 12 feet, are situated ; while in the second story are the dormitories. The boys use the west wing, and the girls the east wing.

On the north side of the main building and connected with it is the fourth part of the school building, 20 x 20 feet, three stories high. In the first story is located the kitchen, in the second the dining-room for the staff, and in the third the teacher's private room.

There is besides the large building a laundry, 18 x 24 feet, a log hut with shingled frame roof, and a small shed, 14 x 12 feet, used as a place for rubbish.

Accommodation.—The school being divided into large rooms gives accommodation to a staff of eight or ten members, and about sixty or seventy pupils.

Attendance.—The attendance has not been so satisfactory during the last fiscal year ; two pupils died, one boy and one girl, and one boy was sent back to his family, on account of bad health. Our two oldest boys have been transferred to Dunbow school. Three pupils only have been admitted during the year.

Class-room Work.—The class-room work consists of reading, spelling, arithmetic, drawing and vocal music.

Farm and Garden.—Up to the present time no farming has been done ; but the school raises the different kinds of vegetables, and the pupils seem to take a great interest in gardening. Every one was proud of his little garden and success has been the result of their work.

Industries Taught.—Besides gardening, the older boys are taught to bake, and the girls to sew, knit, draw and cook.

Moral and Religious Training.—Instruction in the doctrine of the Roman Catholic Church is imparted to the pupils; every morning and evening prayers are said, and half an hour every day is devoted to religious instruction.

Health and Sanitary Condition.—The health of the pupils has not been very good during the winter. One girl died of consumption, another was ill several weeks. Some of the boys suffered from scrofula ; one was taken home by his father. The health of the pupils was good during the summer.

Water Supply.—The river supplies all the water needed in the school, by means of a windmill.

Fire Protection.—Five fire-extinguishers, four hand-grenades, four fire-pails, and four fire-axes are distributed throughout the halls and the rooms, at convenient places.

Heating.—The school is heated by two hot-air furnaces, put up with the help of the Indian department.

Recreation.—When the weather is favourable, recreation is taken outside, under the supervision of an attendant, and in bad weather the pupils play in their respective recreation-halls.

I have, &c.,

L. DOUCET, O.M.I.,
Principal.

NORTHWEST TERRITORIES,
BLUE QUILL'S BOARDING SCHOOL,
SADDLE LAKE, ALTA., June 30, 1901

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report of this school for the year ended June 30, 1901.

Location.—This school is situated on Blue Quill's reserve, about six miles southwest of Saddle Lake, on the Edmonton road, about one mile north of the Saskatchewan river.

Land.—A little over five acres is set apart for school purposes.

Buildings.—The main building is 60 x 30 feet, two and a half stories high, suitably divided into the various departments necessary for the convenience of the school. The girls' dormitory is 34 x 30 feet, and the boys' dormitory 30 x 25 feet. The outbuildings consist of a bakery, laundry, storehouse, ice-house, stables and numerous smaller buildings.

Attendance.—The pupils attend school regularly, all being boarders at the institute.

Class-room Work.—The course of studies authorized by the department is faithfully followed.

Farm and Garden.—About four acres are under cultivation. Vegetables are the principal products of the farm.

Industries Taught.—The boys are taught housework, care of cattle and farming. The girls are taught knitting, cooking, and all sorts of housework.

Moral and Religious Training.—Special care is paid to moral and religious training, discipline and order.

Health and Sanitary Condition.—The general health of the pupils has been as good as usual. Three pupils died during the year, one of meningitis, another from an abscess on the lungs, and another of tuberculosis.

Water Supply.—The water is supplied from a well near the school.

Fire Protection.—Fire extinguishers are on hand, ladders are attached to the house, and there are three stairways from the dormitories to the ground. Fire-pails are always ready.

Heating and Lighting.—The building is heated by wood stoves and lighted by petroleum lamps.

Recreation.—Recreation is allowed three times a day after each meal, during which the pupils indulge in usual outdoor games.

I have, &c.,

H. GRANDIN,
Principal.

NORTHWEST TERRITORIES,
CROWFOOT R. C. BOARDING SCHOOL,
GLEICHEN, ALTA., September 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward herewith the annual report, together with the financial statement for the year ended June 30, 1901, of the Crowfoot boarding school, Blackfoot reserve.

Location.—The school is situated at the south camp of the reserve, about ten miles from Gleichen P.O., and within a few hundred yards of the Bow river.

Buildings.—The school building is large, well ventilated and well lighted ; the main building being 36 x 36 feet, three stories high, with two wings, each 36 x 32 feet, and two stories high. There is also situated behind the main building and adjacent to it a two-story building, 20 x 20 feet. The building not yet being completed is divided at present into an office, reception-room, dining-room, kitchen, working-room and chapel on the ground floor, and the dormitories and class-rooms upstairs.

A well kept picket fence surrounds the grounds in front of the main building, while an ordinary wire fence serves the same purpose at the back and around the garden.

Attendance.—At the close of the fiscal year we had twelve boys and five girls in attendance.

Class-room Work.—The class-room work consists of reading, writing, spelling, arithmetic, drawing, vocal music, &c. The advancement of the pupils in these branches does the teachers much credit. The boys are also taught general housework, and the girls sewing, knitting and the mending of clothes.

Moral and Religious Training.—Instruction in the doctrines of the Roman Catholic Church is imparted to the pupils. Morning and evening prayers are said, and half an hour each day is devoted to religious instruction.

Water Supply.—All the water-supply needed for the wants of the school is obtained from the river.

Fire Protection.—Fire-extinguishers, hand-grenades, fire-pails and fire-axes are distributed throughout the halls and rooms, but this is not sufficient owing to the water supply not being convenient.

Heating.—The school is heated with stoves.

Recreation.—Part of the recreation consists in outdoor exercise, and the remainder in house games. We try to give the pupils a good deal of exercise.

Farm and Garden.—During the summer, a part of each day was devoted to gardening, and the pupils take a great interest in it. Each one had his own garden for flowers and vegetables.

Health and Sanitary Condition.—The health and sanitary condition has been very good and is due mostly to the outdoor exercise. No deaths occurred during the year.

Trusting this report will be satisfactory,

I have, &c.,

J. RIOU, O.M.I.,
Principal.

NORTHWEST TERRITORIES,
CROWSTAND BOARDING SCHOOL,
CROWSTAND P.O., ASSA., July 18, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to present herewith my annual report on the Crowstand boarding school for the year ended June 30, 1901.

Location.—The school is prettily situated on the left bank of the Assiniboine river, about forty-five miles northeast of the town of Yorkton, which is our nearest railway point.

Land.—There are connected with the school about three hundred acres of land, being the south half of section 19, township 29, range 31, west of first P.M. This land is the property of the Presbyterian Church, and was acquired from the Dominion government when the school was built. The land is somewhat rolling, and is adapted for mixed farming.

Buildings.—The school building is frame, 38 x 92 feet, is two stories high, with stone basement underneath, and furnishes ample accommodation for pupils and staff, and for carrying on all departments of household work, besides containing a large and well furnished class-room.

The other buildings are : a frame stable to accommodate twenty-five head of cattle and horses ; a log stable, an open shed, a driving shed, a log workshop, a log storehouse, and a stone milk-house and ice-house combined.

Accommodation.—The buildings furnish ample accommodation for fifty pupils, and a staff of six or seven.

Attendance.—The attendance during the year has been most satisfactory. Last autumn the number of grant-earners was raised to forty, and in a few days we had the full number enrolled, and in addition six non-treaty half-breed children. The average attendance of treaty children for the last six months has been the full enrolment.

Class-room Work.—This department, under the able management of Miss Josephine Petch, has made most satisfactory progress. Regular quarterly written examinations were held, and the results showed a thorough knowledge of the ground covered.

Farm and Garden.—Owing to the extreme drought in the growing months of last season, our crops were really a failure, and two hundred bushels of potatoes had to be purchased.

The growing crops at present give promise of a bountiful harvest.

Industries Taught.—The girls are taught all the necessary departments of household work, as washing, ironing, sewing, mending, knitting, baking, cooking, and dairying. With the boys, attention is given principally to gardening, farming and care of stock.

Moral and Religious Training.—In addition to the regular religious exercises consisting of morning and evening worship daily, Sabbath school and Sabbath meetings for worship, the teaching of moral and religious truth, both by precept and example is kept ever in the foreground.

Health and Sanitary Conditions.—When the new building was being erected two years ago, the sanitary conditions were carefully looked to, and as a result the general health of the school has been good. In the case of two of the children, tuberculosis

developed, and they had to be discharged, but otherwise there has been no serious sickness during the year.

Water Supply.—The Assiniboine river continues to be the source of our supply of water.

Fire Protection.—For protection against fire, we are supplied with two Babcock extinguishers, a dozen and a half hand-grenades distributed throughout the building. There are also fire-pails, and fire-axes, and there is an outside fire-escape from each of the four dormitories.

Heating and Lighting.—The building is well heated throughout by two large wood furnaces, and is lighted by oil lamps.

Recreation.—Boys and girls have separate play-grounds and care is taken to provide all with the means for a suitable amount of recreation.

All of which is respectfully submitted.

I have, &c.,

NEIL GILMOUR,
Principal.

NORTHWEST TERRITORIES,
COWESESS' BOARDING SCHOOL,
CROOKED LAKE AGENCY, BROADVIEW, ASSA., July 2, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report on the Cowesess' boarding school, for the year eneded June 30, 1901.

Location.—The school is situated in the Qu'Appelle valley, south of Crooked lake, on Cowesess reserve.

Land.—There are about sixty acres of land in connection with the school.

Buildings.—The buildings at present erected and in use are as follows: the school, which is a three-story frame building with cement-floored basement, on a stone foundation. Its dimensions are 58 x 38 feet, and the height from the ground to the top roof is 52 feet ; stable 65 x 20 feet.

Accommodation.—Under present arrangements, there is accommodation for sixty-five pupils and a staff of eight.

Attendance.—The present attendance is twenty. But the department has allowed an increase to forty from the first of July.

Class-room Work.—The programme of the department has been followed, and I can say that the progress is fair and encouraging. English is generally spoken and is now quite familiar to almost all the pupils.

Farm and Garden.—There are about fifteen acres this year under cultivation. We have also a garden in which are raised a full supply of potatoes and other vegetables for the use of the school. The garden and farm work gives the boys a healthy outdoor occupation, which, I am glad to say, they greatly enjoy. Quite a number of trees have been planted and they will add a great deal to the pleasantness and the beauty of the surroundings.

Industries Taught.—The boys have special hours during the day for manual work. They also help in caring for the horses, cattle, pigs and poultry, while sewing, knitting and general housework is taught to the girls.

Moral and Religious Training.—Religious instruction is given daily in school, from half-past three to four o'clock. Great care and special attention is given to this part of education and no effort is spared to instruct the pupils thoroughly in principles of faith and religion. The conduct of the children is very satisfactory and order is easily maintained, as there is a regular system and an efficient staff.

Health and Sanitary Condition.—The sanitary condition of the school, owing to the excellence of our fresh air drains and the abundance of light, is very good and the general health of the pupils is a surprise to all our visitors. Frequent baths are resorted to and the premises are always kept in perfect order.

Water Supply.—Our water-supply is taken from a well in the basement and elevated by a gasoline engine and a power-pump of 100 gallons capacity per minute, in a tank placed in the attic, and thence connections distribute it all over the house. We have all the water necessary for ordinary purposes, but still, in order to have always an unlimited supply at hand, another well is being dug. The water is of fair quality.

Fire Protection.—This is abundantly provided for by means of the gasoline engine and pump, connected by a two inch stand-pipe with tank in attic, which tank can be shut off by one pull of lever, then pump direct into stand-pipe, maintaining a pressure of 100 pounds on $1\frac{1}{2}$ with $\frac{7}{8}$ nozzle. These connections are placed in each dormitory and in each hall, also one in basement and one outside of building. The gasoline engine is started by an electric spark and a stream can be playing on the fire in ten seconds. The engine is also provided with tube ignition, and should a fire start in such a place that the engine could not be operated, we should still have a supply of water from the tank on the hose all the time, the water pressure from which is always twenty-three pounds in basement. The pump is provided with a safety valve to prevent breakage. Besides, we have two Babcock extinguishers in a convenient place, and also a dozen fire-buckets hung up throughout the different rooms. I regret to say, however, that we have not been able, as yet, to provide the building with fire-escapes.

Heating and Lighting.—The school is heated entirely by two hot-air 'New Idea' furnaces. An abundant supply of pure air is constantly admitted by the ventilators, which are placed in the dormitories and halls in order to replace the foul air. The building is lighted throughout by acetylene gas, the machine being kept in a properly ventilated room by itself. No light is allowed inside, and matches are placed under the control of the attendants. Moreover, a new system of generators adapted to the acetylene machine by Rev. Brother Eugene, has greatly improved its working and considerably lessened, and even entirely done away with, any danger that might have occurred.

Recreation.—Football, shooting with bows and arrows, playing marbles and checkers, swimming, fishing, singing and fiddling are the favourite pastimes of our boys. The girls amuse themselves with playing ball, skipping, singing and dressing dolls. Two large play-rooms, 32 x 14 feet, one for the boys and one for the girls, are provided for use during bad and cold weather.

General Remarks.—No great difficulty has been experienced, so far, in obtaining new pupils. The parents do not seem to be opposed to schools, except those on the Shesheep's reserve, who still flately refuse to send their children to school.

In conclusion, I have pleasure in bearing grateful testimony to the lively interest taken in our work by Mr. Begg, our agent, who visits us regularly. The members of the staff have the interest of the work at heart, and I am glad to say that there has been progress along the whole line.

I have, &c.,

S. PERRAULT, O.M.I.,
Principal.

NORTHWEST TERRITORIES,
DUCK LAKE BOARDING SCHOOL,
DUCK LAKE, SASK., July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—The school is pleasantly situated about half a mile from the town of Duck Lake, and three miles from the Duck Lake reserve.

Land.—The land in connection with the school comprises one hundred acres, which is the property of the government. Its legal subdivision is section 4, township 44, range 2, west of the third meridian.

Buildings.—The main building has been much improved this year by the addition of a side wing for the girls' use, consisting of two stories, 100 x 36 feet. We have now a spacious dormitory and two class-rooms, which were greatly needed. The entire house has been painted, and many necessary repairs done by the boys.

Accommodation.—The enlargement of the building now gives ample room for the girls' use. Their splendid airy dormitory, with its rows of new iron bedsteads, white counterpanes and pillow shams, is an object of admiration to visitors. Our fifty girls have thus sufficient room, and there is even room for twenty more.

The present staff, which numbers twelve, have their own separate quarters.

Attendance.—The attendance was remarkably good, our pupils varying from ninety-seven to one hundred, the authorized number.

Class-room Work.—All the subjects of the programme have been regularly taught. The studies were not only encouraging and satisfactory to the pupils, but also to the teachers. By the aid of frequent recapitulations and slight rewards, more interest and improvement have been manifested, especially in reading, writing, arithmetic and drawing. The bright new school-rooms, one for the girls' use and one for the boys, fitted up with new patent desks, maps and blackboards, and the requisite school supplies, are a boon to the teachers, and make the work comparatively light. Singing, music and calisthenics are regularly taught, though out of school hours.

Farm and Garden.—Farming has been carried on very successfully ; our garden produce has been most satisfactory. We had this year over 2,500 bushels of potatoes, turnips, carrots, onions, cabbages and beets, which lasted all the year. On the occasion of the Governor General's visit, we were proud to display our splendid vegetables, which His Excellency considered the finest he had ever seen.

Industries Taught.—The bigger boys, according to their age and strength, are taught farming, carpentering, and are as punctual to their allotted hours of work as the best paid white man could be.

The girls learn house, kitchen, laundry and dairy work ; also sewing in all its branches ; and a very pleasing feature is the number of good knitted stockings produced by the little ones.

Moral and Religious Training.—The pupils receive due instruction, and all assist at prayers morning and evening. We are again happy to state that not one case of truancy can be recorded, and that discipline is maintained without employing severe measures.

Health and Sanitary Condition.—This year the health of the pupils has been very good, which we cannot be too thankful for, as so much sickness has been prevalent. A few of the younger ones required treatment for ringworm, but with care they soon recovered. The sanitary condition of the school is excellent, the premises being all kept in perfect order, and the buildings being well lighted and ventilated.

Water Supply.—Two artesian wells give us an abundant supply of water, which never fails, summer or winter, and with the aid of pipes, the kitchen, dormitories and bath-room are also well supplied. About forty barrels are placed under eave-troughs to receive the rain-water for the laundry.

Fire Protection.—Several Babcock extinguishers and grenades are placed in convenient positions throughout the house, and all possible care is taken where fire and lights are used.

Heating and Lighting.—The building is heated throughout by two furnaces. Last fall acetylene gas was placed in the different rooms and passages, also in the yards. The outlay for its installation was no small item, but we feel not only amply compensated by the safe and beautiful light which it gives, but also by the time and trouble it spares.

Recreation.—Two large play-grounds give space for the different games in use by the children. The boys amuse themselves with tops, balls and cricket, and in the summer evenings, by boating and bathing. The girls often go for walks, and find amusement in picking fruit and flowers when in season. Indoor games, also music and singing, fill up the allotted hour on wet days.

Thanking the department for all the kindness I have received,

I have, &c.,

M. J. P. PAQUETTE, Ptre.,
Principal.

NORTHWEST TERRITORIES,
EMMANUEL COLLEGE,
PRINCE ALBERT, SASK., August 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report of this school for the fiscal year ended June 30, 1901.

Location of School and Area of Land.—The school is situated about two miles west of the rising town of Prince Albert. The land in connection therewith is a river lot, having twelve chains frontage and extending back two miles.

Buildings.—There are three buildings occupied by the staff and pupils. The main building is occupied by the female members of the staff and the girls. The bedrooms, dormitories and lavatory are in the upper story, and in the lower story are the school-room for the senior classes, the dining-room, kitchen and pantry. There are also in this building, a clothing-room, sewing-room, and a room for cases of sickness. In the second building is a dormitory for the younger boys, with a lavatory, a room for drugs and medicines, an office, and apartments for the principal. In the third building are dormitories, lavatory, bath-room, reading and recreation-room for the senior male pupils, a room for the head teacher, and also a school-room for the

junior classes. The outdoor buildings are, a large house used as a granary and warehouse, a coach-house, a stable, 44 x 22 feet, a pig-pen, and a hen-house.

Grounds.—The ground immediately attached to the buildings are laid out to afford ample play-grounds for the pupils, both boys and girls.

Accommodation.—The alterations that have been recently made in the rooms of the three buildings will now enable us to accommodate seventy pupils instead of fifty-two. All these buildings have been thoroughly examined, cleaned and kalsomined.

Class-room Work.—The pupils all attend school twice daily, with the exception of the elder girls, who assist in the dining-room and kitchen by turns. The school hours are from 9.30 a.m. to 12 noon, and from 1.30 p.m. to 3 p.m.. Besides the regular school-hours, they have study from 8 to 8.30 a.m., and from 7 to 8 p.m. Our system of study is about the same as that used in the public schools of the Northwest Territories.

Farm and Garden.—Our crops last fall reached two hundred and forty bushels of wheat, two hundred and sixty-four bushels of oats, all of very best quality. We also had about six hundred bushels of potatoes, eighty bushels of onions, about twenty tons of turnips, thirty-five bushels of carrots, and about thirty-five tons of hay. This season we have seeded forty-seven bushels of wheat, thirty-five bushels of oats, five acres of vegetables, three acres in brome grass for feed, and our bigger boys are now at work making hay on the college farm for next winter's use.

Industrial Work.—All the general work required on the premises is performed by the pupils. The boys attend the horses and cattle, milk the cows, draw water, chop wood, do all the farm work, and any ordinary work required. The elder boys are practised in the use of tools. The girls are taught household work, sewing, knitting and cooking. The bread used in the school is made by the girls and baked in a portable oven purchased during the year, in which eighty loaves of two pounds each may be baked at one time.

Moral and Religious Training.—Half an hour each day is devoted to religious instruction. On Sunday the pupils attend two services in the church, which is close by, and they also attend Sunday school every Sunday at 2.30 p.m.

Improvements.—During the year suitable porches were built at the outer doors, six in number, and double windows placed around the large school and dining-room, all of which has added very much to the comfort of the staff and pupils. And during the month of June this year the three buildings were thoroughly overhauled, plastering done wherever it was required, and the whole has been nicely kalsomined. On the farm the larger boys have cleared the brush off a large quantity of land, which will in future be meadow-land. They have also removed the underbrush from the woods in front of the college, so that the view from the college, and also the appearance of the grounds, are much better.

Health of Pupils.—The health of the pupils has never been better. We have not had an occasion for a long time to call Dr. Kitchen, who is our doctor, and who is always very kind and attentive.

Water Supply.—We have three wells on the premises, two of which are well supplied with good water.

Fire Protection.—The department has supplied us with Babcock fire-extinguishers, hand-grenades, fire-buckets and axes.

Heating.—Stoves are used in two of the buildings, but in the main building, where the girls live, a furnace is used. The fuel used is wood.

Attendance.—The attendance has been very regular. During the course of the fiscal year, thirteen new pupils have been admitted.

Recreation.—Our children have plenty of recreation. The boys have cricket, football, swings, military and physical drill, and several of them are at present giving

a good deal of attention to learning to play the instruments of a brass band, and are making fair progress. The girls also have physical drill, swinging, skipping, throwing and catching the ball, reading and music, and a walk almost daily, atttended by a member of the staff.

I have, &c.,

JAMES TAYLOR,
Principal.

NORTHWEST TERRITORIES,
ERMINESKIN'S BOARDING SCHOOL,
HOBBEMA, ALTA., July 23, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—The school is situated on Ermineskin's reserve, about a mile from Hobbema station.

Land.—There is about twenty acres of land in connection with the school, all well fenced and belonging to the mission.

Buildings.—The main building, 50 x 40 feet, three stories high, was erected in 1898. It is entirely given to the pupils' use, and is divided as follows : on the lower floor are the school-room and refectory, 25 x 40 feet, respectively. The second floor comprises boys' sleeping-room, 30 x 40 feet, sewing-room, 28 x 20 feet, and another room for hospital purposes, 12 x 20 feet. The upper floor contains the girls' dormitory, 50 x 40 feet. Another structure, 20 x 25 feet, attached to the main building unites this with the reverend Sisters' dwelling-house. It is composed of a kitchen on the first floor and a private chapel on the second. The reverend Sisters' house, 25 x 30 feet, consists of four rooms on the first floor, and three on the second floor. The old building, which is of little use, is now used as a laundry.

Accommodation.—There is accommodation for seventy-five pupils, and the present staff of seven Sisters.

Attendance.—We have had during the year twenty-seven boys, and twenty-one girls, or a total of forty-eight pupils.

Class-room Work.—The pupils of each standard follow in a strict manner the programme of studies laid down by the department. The standards are as follows :—

	Pupils.
Standard I.	22
" II.	9
" III.	5
" IV.	8
" V.	2
" VI.	2

All the pupils have five hours' study in school every day, and the three higher grades have one extra hour of study, besides the school hours. We are happy to state that they have greatly improved in their different studies, and according to their age we notice more and more an increasing familiarity in the use of the English language.

Farm and Garden.—The product of the garden was not so good as the preceding year. However, one hundred and fifty bushels of potatoes were stored, and we had quite a supply of turnips, beets, carrots and onions. At this time of the year the crops look well.

Industries Taught.—Each day, before and after school time, the pupils have their labouring hours. Immediately after breakfast some of the bigger boys look after the horses, cows, pigs, hens, while others do the sweeping in their own rooms, a third set go to the wood-yard to saw and split wood for the use of the institution. In summer the labour in the garden is in addition to their ordinary work. The girls are taught housekeeping in its various branches. They have appointed hours for sewing, knitting, making of clothing, as well as mending and darning the same. We make them do most of their work by hand, as they seldom have the advantage of using a sewing-machine when out of the school.

Moral and Religious Training.—In general, the pupils have conducted themselves in a very satisfactory manner. They pay great attention to the instructions we give them every day on their religious and moral duties.

Health and Sanitary Condition.—The pupils have enjoyed good health. We had a few cases of la grippe and varioloid last spring. The ventilation is excellent throughout the buildings.

Water Supply.—The water is supplied from two wells close to the establishment.

Fire Protection.—Fire-extinguishers, barrels and pails full of water, trap-door in upper story, and ladders attached to the buildings are our means of protection against fire. We have four brick chimneys.

Heating and Lighting.—The heating of the building is done by ordinary box-stoves, and the lighting by means of lamps.

Recreation.—The pupils have great fun by themselves during their hours of play. They have swings, football and cards. In winter they make up a hill for coasting. During the summer vacation they have a picnic each week, as a reward for their good conduct.

I have, &c.,

S. DAUPHIN, O.M.I.,
Principal.

NORTHWEST TERRITORIES,
FILE HILLS BOARDING SCHOOL,
QU'APPELLE, July 24, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit a report of this school for the year ended June 30, 1901.

Location.—The school is situated on section 32, township 23, range 11, west of the 2nd meridian, about four hundred yards to the west of the File Hills agency building.

Land.—About two hundred acres of land is connected with the school and owned by it. About four acres are inclosed with the buildings for a vegetable and flower garden and lawn.

Buildings.—The buildings are : the home, which is built of stone, with a mansard roof, is thirty feet square, three stories high, well furnished and very comfortable ;

a frame kitchen, 12 x 18 feet, was built this spring; the school-room, about fifteen yards to the west of the home, is a frame building on a stone foundation, 16 x 34 feet, with a porch in front, which is used as a wash-room ; two inferior log stables and a log carriage-house.

Accommodation.—In the home are two dormitories and seven rooms, which will accommodate twenty children and a staff of three.

Attendance.—The number on the roll is fifteen.

Class-room Work.—In the class-room is taught the programme of studies prescribed, with special attention given to arithmetic, composition and the use of the English language.

Garden.—We have about three acres in garden, which is kept free of weeds and promises an excellent return. Last year we had two hundred bushels of potatoes, and turnips, carrots, beets, cabbage and onions to do us all winter. This year the prospect of a large return is much better.

Industries Taught.—The girls are taught sewing, knitting and general housework. The boys are taught gardening, to attend to stock and milking, also to help cut wood, wash, scrub and do general chores. The work shown by the girls at the Indian exhibition was very creditable and won its share of the prizes.

Moral and Religious Training.—Part of each day is spent in religious instruction.

Health and Sanitary Condition.—The health of the children is very fair and has improved much the last year. The sanitary condition is very good.

Water Supply.—We have a sufficient supply of water convenient.

Fire Protection.—The fire-protection is not very good. We have ladders and pails, with water at hand for fire-protection. There are two ways of escape from every part of the building.

Heating and Lighting.—We use stoves and oil lamps for heating and lighting.

Recreation.—The children enjoy the ordinary outdoor sports and games, winter and summer, and various games in the home during the long winter evenings.

I have, &c.,

W. H. FARRER,

Principal.

NORTHWEST TERRITORIES,
GORDON'S BOARDING SCHOOL,
KUTAWA P.O., July 5, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the Gordon's boarding school for the year ended June 30, 1901.

Location.—The school is located on the west side of Gordon's reserve, about twelve miles from the agency headquarters.

Land.—The area of land in connection with the school is not known.

Buildings.—The main building is the same as reported last year, and is used for school purposes. The basement has been ceiled, and the dairy floored. This has made a vast improvement.

There were no changes made to the old school building during the year ; it is used for a laundry, storehouse, play-room, and for carpenter work. An addition,

16 x 18 feet, was added to the stables. These are used for the horses and cattle, and also for a hen-house. The ice-house has been enlarged by an extension, 16 x 22 feet. The root-house remains the same as stated in last year's report.

Accommodation.—There is ample accommodation for thirty-five pupils and a staff of four.

Attendance.—The attendance has been very good, with an average of twenty-six pupils.

Class-room Work.—The pupils' course of work is that laid down by the department. Special atention is paid to instruct them in speaking English.

Farm and Garden.—We have no farm, but our garden consists of about three acres, in which were raised an abundance of vegetables, which have been more than ample for our needs for the year. There is also a beautiful flower garden, which interests the children very much.

Industries Taught.—The boys are taught the care of horses and cattle, the care of the garden in summer, how to cultivate it and keep it free from weeds.

The girls are taught all household duties, butter-making, bread-making and cooking ; and I may say that some of them are very proficient in this work. Special instructions are given to them as to how they should look after things in the house, and not to waste. This has had a very beneficial effect.

Moral and Religious Training.—Careful attention is paid to the pupils in this respect, and their moral conduct has been excellent. In not one case had severe punishment to be administered during the past year.

Health and Sanitary Condition.—The health of the pupils has not been good. We had three or four cases of scarlet fever, of a very mild form, also very severe colds during the winter. One boy died at his home after a short illness, of consumption. A little girl died in the school of tuberculosis of the brain and spine, after a three weeks' illness.

The sanitary condition is all that can be desired ; the school is well ventilated and clean ; since the few cases of scarlet fever, it has been alabastined and painted, and all bedding washed.

Water Supply.—Our water-supply is obtained from two wells about three hundred yards from the school. These are situated in a slough and cannot be reached in the spring. This necessitates having to use slough water, which I think is not wholesome. The well mentioned in my last report as being situated a few feet from the building has been cleaned out. It has a good supply of water, but it is unfit for cooking purposes.

Fire Protection.—This consists of two Babcocks, two Carr chemical fire-engines, one pump, two lengths of hose, twelve buckets, six axes, seventeen hand-grenades, nine fire-extinguishers and a small tank, besides several barrels. The pump and hose are useless without a tank in the basement, as they are fitted for that purpose. The small tank has been put up outside the building ; it is a very inferior one, being of pine wood, and is now leaking. One Babcock is unfit for use. This has been reported in my returns.

Heating and Lighting.—The building is heated with stoves, and is very comfortable ; but we cannot get sufficient heat from the pipes to keep the frost from coming through the walls upstairs. This I attribute to the walls not having sufficient mortar in the centre.

The lighting is done with coal oil.

Recreation.—Football and swings are the favourite pastimes during the summer months ; coasting in winter, and many other games in the school-room pass the time during the long winter evenings.

I have, &c.,

M. WILLIAMS.
Principal.

NORTHWEST TERRITORIES,
HOLY ANGELS BOARDING SCHOOL,
NATIVITY MISSION, FORT CHIPEWYAN,
ATHABASKA LAKE, August 3, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have pleasure in forwarding the annual report on matters concerning our school, hoping that my efforts to give as precise a narration as possible will prove satisfactory.

Location.—The Holy Angels boarding school at Nativity mission, near Fort Chipewyan, belongs to the Roman Catholic mission, and is under the care of the Sisters of Charity, commonly called Grey Nuns, of Montreal ; it is situated on the bank of the Athabaska lake, facing its waters, and is lined on every other side by naked and barren rocks, formerly covered with fir-trees.

Fort Chipewyan possesses no post office ; neither are we located on any reserve.

Land.—The soil is sterile and rocky. Not far from our building there is a little flat and low stretch of land, which in former days was a lake. As no place fit for cultivation could be found, the Right Rev. Bishop Farand drained this lake and succeeded in making a field fifteen acres in area. This is the only farm we possess.

Although the soil is lacking in many good qualities, it is, nevertheless the most susceptible of cultivation that can be found in all the surrounding district. Our little tract of land admits of the cultivation of barley and potatoes, when these are not damaged by frost, which is very often the case. Carrots, cabbage and turnips are not so easily affected by the sudden changes of temperature which occur so often during the summer heat, but unfortunately they thrive very poorly in our unfruitful soil.

Buildings.—The institution comprises three buildings, forming an open square, facing the north. The west wing comprises an area 38 feet long, 27 feet wide and 35 feet high ; the centre building is 50 feet long, 30 feet wide, rising to a height of 30 feet. The east annex, which is now being built, will be 50 feet long, 25 feet wide and 35 feet high. A large class-room, an infirmary for boys and a refectory, two parlours and a kitchen, to which a wash-house is added, are on the first floor of the east and centre buildings. The second story contains the girls' dormitory and infirmary, further on is a little chapel and rooms reserved for the use of the Sisters in charge. Above, in the garret, is the boys' dormitory. The buildings are two stories high, with large garrets. The new wing will be three stories high and after its completion the little girls will take possession, and thus be further removed from the boys. The ground floor will be used for a kitchen and two refectories, the second story for a recreation and sewing-room, and the upper flat will be used as a dormitory.

Accommodation.—Accommodation can be provided for sixty pupils, seven Sisters and six auxiliary or lay Sisters.

Attendance.—School is kept open regularly, except on usual holidays, and the pupils are attentive.

Class-room Work.—The subjects taught are : reading, writing, grammar, arithmetic, geography, history of Canada and vocal music.

Farm and Garden.—The children weed the garden and help in whatever little work they can do on the farm, besides the boys saw and chop the wood required for fuel.

Industries Taught.—The girls are taught : sewing, knitting, darning, embroidery and cooking, in fine nothing is neglected to instruct them in becoming good housekeepers.

Moral and Religious Training.—The pupils daily assist at divine service given in our chapel on week days. They attend the mission church on Sundays. The Rev. Father in charge instructs them with great care in their religious duties, which we endeavour to make them understand and practise.

Health and Sanitary Condition.—The Indians' state of health is very precarious. An epidemic having broken out in Athabaska, the children as well as the majority of Indians contracted the disease. Only one pupil died at the school, but many of those who, at their parents' request, left our school, hoping to recover from the sickness at home, died after a short time.

As a general rule our children are quite healthy. Doctor O. C. Edwards kindly gave us a certificate of the present condition of the children's health, as follows :—

Holy Angels, Fort Chipewyan,
August 8, 1901.

I hereby certify, that I have this day visited this convent and examined the school premises and also examined each pupil in attendance. The school premises are in a thorough sanitary condition. Twenty boys and eighteen girls are present to-day, also the principal. Their state is thoroughly satisfactory.

O. C. Edwards, *M.D.*

Water Supply and Fire Protection.—We use no other water than what we draw from the lake. The only fire-appliances on hand are a force-pump, with hose, ladders, buckets and axes, to which we shall add a large tank after the completion of the new wing.

Heating and Lighting.—Wood is used for heating, and coal oil for lighting purposes.

Recreation.—Outdoor games are indulged in as often as the weather permits. In calm weather when there is no danger in sailing on the lake in skiffs or in the steamboat when possible, picnic excursions are taken to one of the many islands that dot the lake, and are greatly enjoyed. These little excursions are the chief sports in summer. During the cold season, a long walk taken every day proves beneficial.

I have, &c.,
SISTER McDOUGALL,
Principal.

Northwest Territories,
Isle à la Crosse Boarding School,
Isle à la Crosse, August 20, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The Isle à la Crosse boarding school is situated on a peninsula, about two hundred and forty-six feet from the edge of the lake. Unfortunately this spring the lake was higher than ever before, the water having risen to the front of a yard situated about eighty feet from the boarding school.

Land.—We have about seventy acres under cultivation and about thirty more remains to be cleared. The land on which the boarding school is situated is the private property of the mission.

Building.—The building has a frontage of 8 feet and a depth of 30.

Accommodation.—There is accommodation at present for forty girls and twenty boys.

Attendance.—The twelve children admitted to the boarding school, being boarders, attended school regularly every day.

Class-room Work.—The subjects taught are : religious instruction, grammar, arithmetic, geography, spelling, dictation, writing, reading, and useful knowledge. This year the children have made good progress and proved themselves very studious.

Farm and Garden.—The farm and garden have been carefully worked. The crop was fair. There was no frost until the end of August.

Industries Taught.—The children are taught how to plant potatoes, sow barley, &c. The girls are taught cooking, sewing, knitting, and general housework. They make all the clothes worn by themselves.

Moral and Religious Training.—The children are under the care of the Sisters, and I can certify that they are well looked after and well instructed both by example and precept. They are carefully trained in moral and religious subjects. Their conduct on the whole is pretty good, and they are giving satisfaction.

Health and Sanitary Condition.—The children have enjoyed pretty good health. Great precaution has been taken in every way to secure the best sanitary conditions among them.

Water Supply.—The water is taken from the lake, consequently our water supply occasions us very little trouble.

Fire Protection.—Barrels of water are kept constantly on hand in different parts of the building, and there is also a small pump at the convent, about sixty yards from the school.

Heating and Lighting.—Stoves heat the rooms ; wood is the fuel employed, and we use coal oil for the lighting.

Recreation.—There are play-rooms for the boys and girls in their respective quarters and also separate recreation-grounds for each.

General Remarks.—The children are making progress in their knowledge of the English language. On Sundays, in church, the voices of the children lead the congregation. The children are very happy and glad to remain at the school, where they are really at home.

It has always been very easy to recruit pupils for this school.

Before closing, I beg to thank the department for the kindness and interest it has shown to our school. These Indians have been for some time extremely anxious to have their children well educated, and I hope the government will increase the grant to provide for forty or fifty pupils.

I have, &c.,

I. RAPET,
Principal.

NORTHWEST TERRITORIES,
ST. BERNARD'S MISSION R. C. BOARDING SCHOOL,
LESSER SLAVE LAKE P.O., June 22, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—The St. Bernard's mission is situated on the northeastern banks of Lesser Slave lake, on a beautiful hill which slopes towards the lake and commands a view of the surrounding country.

Buildings.—There are three buildings. The main structure is seventy-two feet long by twenty-eight feet wide, and three stories high. The boys' house is sixty feet long by twenty-five feet wide, and two stories high. The third building, which has been set apart for a school-house, is thirty feet long by twenty-four feet wide, and three stories high.

Accommodation.—The girls have their apartments in the main building ; these comprise a large recreation-hall, two roomy and well ventilated dormitories, a cheerful sewing-room, and a refectory. The kitchen has also been removed to this house. The remaining apartments are occupied by the members of the staff.

Several improvements were made upon the house which served last year for kitchen, boys' dormitory and dining-room. This building is now occupied exclusively by the boys, and affords the same advantages as the girls' departments.

Land.—The area of land connected with the school is about nine acres, and belongs to the mission.

Attendance.—Our pupils, for the greater number, enter school in September and leave at the end of June. The average attendance is between fifty and sixty pupils ; about forty remain during the summer months.

Class-room Work.—Very satisfactory work was done by the pupils in the class-rooms. The children are well advanced for their years, and many of them seem to appreciate the advantages of an education. The branches taught are : reading, spelling, arithmetic, grammar, geography, history, writing, composition, ethics, vocal music, instrumental music, drawing, calisthenics, &c.

Farm and Garden.—About two hundred and ninety-five acres of land are under tillage, the farm comprising two hundred and fourteen acres ; the rest is cultivated as a garden.

Industries Taught.—The young girls learn the culinary art, washing, ironing, sewing and dressmaking ; in a word, everything that a good housekeeper ought to know. The boys are early accustomed to work on the farm.

Moral and Religious Training.—Their moral and religious training is based upon the pure and unsullied doctrines of Holy Scripture.

Health and Sanitary Condition.—With the exception of a few slight colds, the pupils have all enjoyed perfect health during the past year. The climate is most healthy.

Water Supply and Fire Protection.—Very good water is supplied by wells, dug close to the house. These wells and ladders are our only protection against fire.

Heating.—A hot-air furnace was put in under the principal's building last fall, and is giving great satisfaction. The other houses are heated by stoves, in which we

burn pine, spruce, poplar and birch. The surrounding forests abound in trees of this kind.

Recreation.—During the summer months the children amuse themselves with football, swings, skipping-ropes, bow and arrows, marbles and boating ; in the winter they have tobogganing, skating, and indoor amusements common to their age.

Per Capita Grant.—The government grant for the past year was $72 per capita for each of forty pupils.

I have, &c.,

C. FALHER, O.M.I.,
Principal.

NORTHWEST TERRITORIES,
MUSCOWEQUAN'S BOARDING SCHOOL,
TOUCHWOOD HILLS, ASSA., July 9, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit the following annual report of this school for the fiscal year ended June 30, 1901.

Location.—The Muscowequan's boarding school is located about twelve miles from the Touchwood agency and Kutawa post office, outside of the Indian reserve.

Land.—The land connected with the school is a homestead of one hundred and sixty acres, situated on the quarter of section 14, northwest, township 27, range 15, belonging to the society of the Oblates. There is a large garden, prettily laid out in front of the house, trees are planted alongside of the former. On one side of the school a nice parterre surrounded with trees has been laid out ; there is an avenue, eighty feet wide, and good fences on each side.

Buildings.—The school buildings include the old church which now serves as a school-room, and a new stone house erected four years ago. The basement comprises a large cellar, part of which is used as a root-house and dairy. On the first floor are : a kitchen, a small room for bake-oven, a pantry, refectories for Sisters and pupils, two smaller rooms for visitors, a chapel where pupils assemble for morning and evening prayers. On the second floor : girls' dormitory, sewing-room, play-room, and Sisters' apartments. There is also a large and comfortable attic. The other part of the building, forming an angle with the first, contains on its first floor : the class-room and play-room for the boys ; on the upper floor is the boys' dormitory. The other buildings are : the principal's house, the church, the carpenter's shop and the stables.

Accommodation.—This school has ample accommodation for forty pupils and a staff of seven persons.

Attendance.—Thirty children attended school regularly during the year.

Class-room Work.—Classes are taught in the morning and in the afternoon. School hours are from nine to twelve, a.m. and from two to four o'clock p.m. The programme laid out by the department is strictly enforced. Much attention is paid to correct English conversation, writing, reading, arithmetic, spelling, drawing, geography and vocal music. Satisfactory progress has been noticed during the past year in all the above-mentioned subjects.

Industries Taught.—The girls are trained in all branches of domestic work : baking, cooking, laundrying, sewing, knitting, dressmaking, rug-making and darning.

All the children's clothing is made in the school. Gardening, haying, stable-work, cutting and carrying wood, form the principal occupations of the boys.

Moral and Religious Training.—Great care and special attention are given to this part of education, and no effort is spared to instruct our pupils thoroughly in principles of faith and religion. The conduct and general behaviour give great satisfaction, and it is a matter of surprise and pleasure to find how willingly they practise the lessons taught them.

Health and Sanitary Condition.—The health of the children has been remarkably good during the whole year, and I am happy to say that only one case of mortality has to be reported.

Water Supply.—Water is supplied to the school from three wells, two on the premises near the school, and one in the cellar under the kitchen, from which water is drawn by means of a force pump, which conveys the water to a tank fixed near the roof of the building, from which the water supply is distributed by means of iron pipes, to the kitchen and girls' rooms. There is also a force pump in one of the outside wells and a hose for watering the garden and surrounding grounds.

Fire Protection.—The school has been provided by the department with two Babcocks, twelve fire-pails—which are always kept filled with water—fire-extinguishers and axes. All these are put in convenient places through the building.

Heating.—The building is heated by seven stoves with wood fires.

Recreation.—In winter-time the pupils are supplied with different games, music, singing and outdoor exercises. In the summer months the boys take great delight in football, swings, croquet, arrow-shooting and gymnastic exercises. The girls, in playing, singing and other games.

I have, &c.,

I. JACOB,
Principal, pro temp.

NORTHWEST TERRITORIES,
McDOUGALL ORPHANAGE AND BOARDING SCHOOL,
MORLEY, ALBERTA, July 24, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report on the above school for the year ended June 30, 1901.

Location.—The school is situated on lot eight of the Belanger survey, Morleyville settlement, between the forks of Ghost and Bow rivers, and about four miles east of the eastern boundary of the Stony reserve, north of Bow river.

Land.—The land owned by the school consists of one thousand one hundred and thirty-seven acres. This land was given to the school by the government. The quality of the land is very poor, being mostly of a gravelly nature, and is almost exclusively adapted to grazing purposes.

Buildings.—The main buildings are frame, and since last report a new wing has been added, 40 x 26 feet, with basement and stone foundation. The basement of this wing is used as a recreation-room for the girls, the ground floor as a dining-room, and first flat as girls' dormitory ; also containing two rooms which are used for lady members of the staff.

The whole building, together with the school-room, has had three coats of paint outside.

Accommodation.—The school at present accommodates forty-five pupils and eight members of a staff.

Attendance.—The attendance for the year has been very good, and fully as many pupils as the rule of health would allow have been present all year.

Class-room Work.—The progress in this department has been very good and most satisfactory.

Farm and Garden.—Owing to our nearness to the mountains, no farming can be done further than the growing of a quantity of green feed for stock, and a small quantity of vegetables. We have at present in this line: thirty acres of oats; one acre of brome grass; one acre of potatoes; half acre of turnips, and a quarter of an acre of carrots and beets, all of which promise to be a good crop.

Industries Taught.—The boys are taught in the various branches of ranching, teaming, ploughing, fencing and mowing, but as they are all small, they are incapable of any heavy work. The girls are taught efficiently in the various branches of housework, sewing, knitting, mending, cooking, laundry, &c.

Moral and Religious Training.—In every way possible we have tried to train these children in the faith in which we believe, and we are thankful that our efforts have not been in vain. The morals of the pupils are very good. Cases of punishment have been very few and far between.

Health and Sanitary Condition.—The health of the pupils has not been very good, although we have had good medical attendance. Dr. Lafferty has responded promptly to our calls, and done all he could for us. The months of February and March are very hard on these children.

Fire Protection.—The only fire-protection we have consists of four Babcock fire-extinguishers, which are carefully attended to, and placed convenient for use.

Heating.—The building is heated by two wood furnaces, one of which is new and in good order ; the other was put in some years ago, and requires attention in the way of repairs.

I have, &c.,

JOHN W. NIDDRIE,
Principal.

NORTHWEST TERRITORIES,
ONION LAKE R. C. BOARDING SCHOOL,
ONION LAKE, July 26, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The school is situated on Seekaskootch reserve, about twelve miles from Fort Pitt, on the north side of the Saskatchewan river.

Land.—About four acres of land are fenced in and set apart for the use of the school, garden, yards and play-grounds.

Buildings.—The school is a frame building, 45 x 35 feet, exclusively for the use of the school ; the convent, kitchen, laundry and storehouse are separate buildings. The staff occupy private buildings.

Accommodation.—There is good and ample accommodation for fifty pupils, and if it were not for the boys' dormitory, I would say for seventy pupils.

Attendance.—The number of pupils authorized by the department is fifty; this number was complete throughout the year.

Class Work.—The programme of studies laid down by the department is faithfully adhered to. The class-work is done neatly and with great application and emulation. All the pupils, except the little ones of standard I, are subscribers to the entrance pamphlet, published by the Educational Publishing Company. The pupils are greatly interested in their papers, and work the questions contained in them.

Farm and Garden.—About two acres of land is cultivated for gardening and vegetables ; flowers of every kind are raised. Both boys and girls take an active part in gardening, and this year success rewarded their labour, for the garden is very beautiful.

Industries Taught.—The boys are taught gardening, care of horses and cattle, and as no man-servant is kept, all the little jobs of repairing, carpentering, &c., are done by them, and we are often surprised and pleased to see how ingenious they are to do things, and to do them as perfectly as they can. Besides this, they have their own apartments to care for, except scrubbing, help with the washing and baking, and do the cobbling for the school. The girls are carefully instructed in every department of general housework. All the clothing for both boys and girls is made in the house. The girls cut and make their own. Lady visitors, inspecting their work several times during the year, have given them great praise for their darning and patchwork.

Moral and Religious Training.—The moral and religious training of the children receives special care. Respect for all authority and obedience is continually inculcated and insisted upon. Besides, a certain time each day is devoted to Christian doctrine.

Health and Sanitary Condition.—The health of the pupils during the year has been very good. The small-pox epidemic broke out on the reserve, and several houses were quarantined, but by taking the greatest of care and not letting any pupil out of the school, on any account, we have escaped the dreaded plague. Great thanks are due the department for its kindness and interest in sending out doctors to vaccinate and to care for the sick. Thanks and credit are also due to the members of the Northwest Mounted Police, and particularly to Sergeant Hall, for his untiring efforts and watchfulness in keeping the disease from spreading. Two pupils died this spring after a very short illness; one from consumption of the throat and the other of liver complaint.

Water Supply.—Plenty of good water is supplied from a well, a short distance from the house.

Fire Protection.—One well, ladders, stairs and galleries are our chief protection against fire. Fourteen pails, three axes and extra ladders are kept in convenient places.

Heating and Lighting.—The building is heated with stoves. Good temperature is maintained. Coal oil lamps light all the house. The lamps are all in suspenders, and hang one foot above the tallest pupil in the school. Pupils are strictly forbidden to take lamps out of suspenders while lighted. The lighting and putting out is in the superior's charge.

Recreation.—The same attention is given to the children's recreation as to their other routine. Two hours and a half of recreation is given them each day ; in summer one hour more in the evening. Boys and girls have each their respective yards,

and are always under the supervision of their teachers, who often take part, invent new games and award prizes to encourage and animate the games. In summer, foot-ball, lawn tennis, croquet, swings, skipping ropes, bow and arrows, picnics, walks and fruit-gathering are the chief sources of amusement ; and in winter, toboganning, skating and coasting. Indoor amusements according to their taste, are the winter pastimes.

I have, &c.,

CYPR. BOULENE, O.M.I.,

Principal.

NORTHWEST TERRITORIES,
ONION LAKE C. E. BOARDING SCHOOL,
ONION LAKE, SASK., July 18, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg herewith to submit the annual report of the school under my charge in this agency.

Location.—This school is situated on the northeast corner of Makaoo's reserve, and about three hundred yards southwest of the agency headquarter buildings.

Land.—There are perhaps twenty acres of land connected with the school and mission, this land being part of the Indian reserve.

Buildings.—The school-house is a log building, 24 x 30 feet, three stories high. The first floor is used only as a school-room and is the full size of the building. The second floor is used as a dormitory for boys, and a room, 10 x 12 feet, is partitioned off in one corner for the officer in charge of the dormintory. The third floor is the full size of the building, and is used as a dormitory. There are no partitions.

Near the school-house stands the boys' recreation-room. This room constitutes the lower floor of a log building, $20\frac{1}{2}$ x $22\frac{1}{2}$ feet, two stories high. On the upper floor of this building is the sewing-room and store-room for children's clothes. Near this building is a storehouse some 15 x 20 feet with a garret for storing clothes ; provisions, beef, fish, and game are stored on the lower floor.

The buildings, which form the quarters of the staff and all the girls of the school, are made up of six buildings, put up at different times, but all connected ; any one of the four outer doors gives entrance or egress to the whole building, which is about 60 feet square.

On the lower floor of this building is the principal's office, Indian room, pantry, kitchen, laundry, sitting-room, dining-room and dispensary. All the upper floors are used as bed-rooms for the staff and dormitories for the girls, the dormitories for the girls being one flat, 24 x 36 feet, without partitions, and another 20 x 24 feet, likewise without partitions. Within the last year I have added a building 20 x 20 feet, two stories high, to the buildings occupied by the staff. This addition forms the quarters of ladies comprising the staff, and leaves the girls' dormitories unobstructed by any partition, and places the rooms of the staff in such a position that they have at all times entire command of the dormitories. There is a cellar 20 x 30 x 7 feet. I also built a carpenter shop and general storehouse 22 x 26 feet, two stories high, which we find a great convenience.

Our stables have been enlarged and finished till now they are second to none in this place.

Accommodation.—Accommodation can be provided for a staff of eight, and also for sixty pupils.

Attendance.—All the children being kept in the home, the attendance has been perfectly regular, except in rare cases, when a child would be sick. These cases, however, have been very rare and of only short periods, until the recent outbreak of small-pox among us.

I am happy to say, though, that only four of our Indian children showed any symptoms of the disease (three of them very slightly) and all fully recovered some months ago.

Class-room Work.—Very marked progress has ben made in class-room work during the past half year, especially is the improvement noticeable in reading, writing, arithmetic and English-speaking.

Farm and Garden.—We only farm a very limited piece of ground—a trifle over an acre. Still off that patch of ground we raise ample vegetable and root crops to supply our whole household, consisting of about sixty souls. The work is almost entirely done by the staff and scholars.

Industries Taught.—Carpentry and house-building are the principal industries the boys are taught. They also have the care of horses and poultry, as well as the care of the cows and the milking, and working of the cream-separator is also part of their work or duties. We also raise a few hogs, and this forms part of their work.

Girls are taught knitting, sewing, cooking and general housework and the making of butter and cheese.

Moral and Religious Training.—To this part of their education particular care and attention is paid. Each one of the staff fully recognizes that, without careful moral and religious training, all the other training is simply wasted, or worse than wasted. We do not aim to teach them the tenets of any particular church, preferring to teach them the simple old gospel. 'The old, old story'—Christ first, the church afterwards.

Health and Sanitary Condition.—With the exception of the outbreak above mentioned, the health of all the school has been exceptionally good.

I am not aware of a single child having been bedridden through disease for a greater length of time than a single day.

Water Supply.—Our water-supply is ample, four wells being used, and each of them containing a fine supply of good water.

Fire Protection.—Two small chemical fire-extinguishers, ten fire-pails, three axes and constant watchfulness and care as to stoves and stovepipes, are all the protection we have in the large building occupied by the staff and girls of the school. At the school-house and boys' dormitory there is a well with abundant water, a force-pump and hose and nozzle for same.

Heating.—All our premises are heated with wood stoves. In places where there is greater danger of children playing with fire I use top-draft stoves, so that it is almost impossible for the children to get at the fire.

Recreation.—The principal recreations are football, baseball, swings and athletics, including the cross-cut saw or the wood pile.

All of which is respectifully submitted.

I have, &c.,

J. R. MATHESON,
Principal.

NORTHWEST TERRITORIES,
PEIGAN C. E. BOARDING SCHOOL,
PINCHER CREEK, ALTA., June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—This school is built on the banks of Pincher creek, and is situated on the northeast quarter of section 12, township 7, range 9, west of fourth meridian.

Land.—The school owns forty acres of land, being legal subdivision 9 of section 12.

Buildings.—The buildings consist of a boarding school proper, a carpenter's shop, stable, and other necessary buildings.

The boarding school is 78 x 32 feet, over all. It is built of wood, and is lathed and plastered throughout. It contains kitchen, back kitchen, dining, play and sleeping-rooms for the children, and rooms for the staff, as well as store-rooms and lavatories.

Accommodation.—This school has accommodation for forty pupils : twenty boys and sixteen girls, also accommodation for a staff of six persons.

Attendance.—The attendance has been good.

Class-room Work.—The children have made good progress in all their studies.

Farm and Garden.—Two acres were ploughed and fenced last fall, and is now planted with all kinds of vegetables.

Industries Taught.—The boys are taught to take care of cattle, horses, pigs, and poultry. They do all the bread-making, cut wood, and do the general housework in their part of the building.

The girls are taught housework, knitting, and washing, and assist in the kitchen.

Religious and Moral Training.—Religious instruction is given daily by the principal, and on Sunday one service is in their native tongue ; everything is done both by precept and example to improve the morals of the pupils.

Health and Sanitary Condition.—Two deaths took place during the year, otherwise the health of the pupils has been good.

The sanitary condition is excellent, the buildings are well ventilated throughout.

Water Supply.—All the water is drawn from a drive well in the kitchen, and is always pure.

Heating.—The building is heated by means of hot air from two large furnaces in the basement.

Recreation.—The pupils have ample grounds to play in. All kinds of outdoor games are played, such as football, hockey, and others.

General Remarks.—The staff consists of principal and matron, teacher, and girls' matron. The school is not as full as it might be, as there are still many of school age on the reserve who ought to be in school.

I have, &c.,

W. R. HAYNES,
Principal.

NORTHWEST TERRITORIES,
PEIGAN R. C. BOARDING SCHOOL,
MACLEOD, ALTA., July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—Complying with the wishes of the Indian department, I beg to submit my annual report for the fiscal year ended June 30, 1901.

Location.—The Sacred Heart boarding school on the Peigan reserve is handsomely situated on the north side of Old Man's river, on a small elevation about the centre of the reserve, and in close proximity to the agency buildings. Peigan reserve, Macleod, N.W.T., is the post office address of the institution.

Land.—The land on which the school is built belongs to the reserve, and half an acre is fenced for a vegetable garden, where we grow every year a good crop.

Buildings.—The school building, consisting of a large house, 84 x 26 feet, and an addition on the north side of 20 feet square, used for pantry, and 24 x 20 feet for kitchen, constitute the buildings at this institution. The centre building is 30 feet square, two stories high, and the roof part, which is not finished, and consequently unoccupied, gives accommodation to the staff. On both sides, west and east of the centre building, there are two wings, divided into three large rooms, which are used as recreation-room, school-room and sleeping-room.

Accommodation.—Accommodation can be provided for forty children, but so far we have not succeeded in getting a grant for more than twenty, although a larger number of children are in attendance.

Attendance.—Twenty-six boarding pupils are in attendance at present, and two are absent on account of sickness.

Class-room Work.—We are following the programme as given by the department.

Farm and Garden.—Our children are too small to work on the farm, but at special hours they help in the garden.

Moral and Religious Training.—Special attention is given to our pupils, and catechism is taught every day.

Health and Sanitary Condition.—Since the last report, six pupils died of an unknown sickness. The remainder are in good health at present.

Water Supply.—This year we dug a well near the buildings, which will supply the needs of the school.

Fire Protection.—One fire-extinguisher, axes, and buckets full of water are always kept on hand.

Heating.—We use common coal stoves to heat the buildings, and hope something better will be granted by the department.

Lighting.—Coal oil lamps are used to light the institution.

Recreation.—Great care is taken in this matter. The children are regularly in the open air and take their recreation. When inside they have large and well ventilated rooms in which to play.

General Remarks.—We are thankful to the department for the attention given to our school in sending us supplies of different kinds, but especially for school supplies.

I have, &c.,

L. J. DANIS,
Principal.

NORTHWEST TERRITORIES,
ROUND LAKE BOARDING SCHOOL,
WHITEWOOD, ASSA., September 18, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The school is situated in the Qu'Appelle valley at the east end of Round lake.

Buildings.—The buildings are frame on stone basements. The main building contains kitchen, laundry, dining-rooms, waiting-room, parlour, girls' waiting-room and sleeping-rooms, store and sewing-rooms, principal's rooms, cellars, &c.

The school-house contains school-room, teachers' rooms, farmer's room, boys' sleeping-rooms and class-rooms.

Accommodation.—The buildings contain accommodation for sixty or seventy children.

Sanitary Condition.—The location is well drained towards the river and lake. Every impurity is removed, and surroundings kept clean. The rooms are large with good light and ventilation. An abundant supply of good food is provided. Cleanliness is observed in all departments, and exercise, sports, amusements and the cultivation of cheerful dispositions serve to keep the pupils in good health.

Fire Protection.—Chemical fire-extinguishers, a good supply of water and fire-buckets are kept in readiness. The stove-pipes and flues are kept clean and in order. Particular care is taken about fires. Barrels filled with water are kept in convenient places.

Farm and Garden.—Two acres of land are cultivated for garden purposes in which all kinds of vegetables desirable for our school's use are cultivated, viz., potatoes, turnips, onions, cabbage, tomatoes, mellons, corn, pease, beans, &c. The boys find useful and profitable employment in the garden.

We have three hundred and twenty acres of land—about eighty of which is under cultivation. The rest is used as pasture land, and is inclosed with a wire fence. We have the latest improved machinery for farming, including a No. 4 Massey-Harris binder. We have two span of horses, two yoke of oxen and about one hundred head of cattle.

Dairy Work.—Forty cows are in good condition. The boys assist at milking, which they are able to do with cleanliness and care. The girls help in taking care of the milk and butter.

Girls' Work.—Under suitable and skilful direction the girls learn all kinds of housework, baking, cooking, laundry-work, general housework, sewing, knitting, mending, the cutting and making up of their own garments and the garments of the smaller boys.

Religious Instruction.—This is the most important part of our work. Religious instruction is given at morning and evening devotions. Sabbath school and church services are held each Sabbath, and in all our work and dealings with the children we try to build up a true character.

Water Supply.—We have an abundant supply of water, which is obtained from the lake, the river and from springs.

Heating.—Wood stoves are used for heating purposes.

Class-room Work.—The average attendance was about thirty. Good progress has been made and the studies prescribed by the department are adhered to. The teacher, Mr. Hendry, is well qualified and is deeply interested in his work.

General Remarks.—We wish to thank the agent, Mr. Begg, for the interest he has manifested in the school and the department for the assistance given.

All of which is respectfully submitted.

I have, &c.,

H. McKAY,

Principal.

NORTHWEST TERRITORIES,
SARCEE BOARDING SCHOOL,
CALGARY P. O., ALTA., August 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith a report of the Sarcee boarding school for the year ended June 30, 1901.

Location.—The school is situated on the southeast corner of the reserve, and near the agency headquarters.

Land.—About ten acres are fenced in for the purposes of the school and mission combined.

Buildings.—The school is under one roof, boys' and girls' wings being separated by dining-room and kitchen. The boys' wing is 24 x 50 feet. The ground floor consists of teacher's sitting-room, office, recreation-room, bath-room and school-room. The upstairs consists of teacher's bed-room, dormitory and clothing-room. The dormitory is 24 x 30 feet. The girls' wing consists of matron's quarters, recreation and work-room, and bath-room, on ground floor. The whole of the upstairs is used for a dormitory. It is 22 x 24 feet. The dining-room and kitchen, which separate the two wings, are 18 x 25 feet and 18 x 18 feet respectively.

Accommodation.—There is accommodation for twenty boys and ten girls.

Attendance.—The number on the roll on June 30 was eleven : three boys and eight girls.

Class-room Work.—This has gone steadily on during the year, and great improvement has been made, especially in English. The schedule is followed. The grading on June 30 was as follows :—

	Pupils.
Standard I.....	3
" II.....	2
" III.....	4
" IV.....	2

Moral and Religious Training.—Special attention is given to this side of the work, the staff ably assisting me. Prayers are held daily, with religious instruction, and the pupils attend twice every Sunday the services in the mission chapel close by.

Health and Sanitary Condition.—One death occurred in October last from consumption. With this exception there has been but little illness. The health of the pupils is now good.

Fire Protection.—Barrels of water, buckets and axes are placed in convenient positions. Two Patton fire-extinguishers were received from the department in the spring.

Heating.—This is done by stoves.

Repairs and Painting.—The foundation of a portion of the building was repaired by the department during the year, and the whole exterior of the school has been painted, the expense being borne by the department.

General Remarks.—Five boys were transferred to the Calgary industrial school during the year. Only one boy has been obtained towards filling up the vacancies. There are several of school age, both boys and girls, on the reserve, but it is difficult to get hold of them.

The staff is reduced to Mr. and Mrs. Stocken, the difficulty of obtaining suitable assistants being nearly as great as that of obtaining children.

I have, &c.,

J. W. TIMS, C.M.S.,
Principal.

NORTHWEST TERRITORIES,
SMOKY RIVER (ST. AUGUSTINE) BOARDING SCHOOL,
SMOKY RIVER, June 17, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR—It gives me great pleasure to submit the first annual report of the Roman Catholic boarding school at St. Augustine, Smoky river, for the year ended June 30, 1901.

Location.—The school is situated about ten miles above the Peace River crossing, on the north side of the river, and nearly opposite the mouth of the Smoky river.

Land.—The area of land connected with the school consists of about three hundred and fifty acres, owned by the Oblate Fathers. Forty acres are under cultivation, and on a portion of this land the school stands ; but the entire property can be adapted to agricultural purposes.

Buildings.—The buildings are as follows : one two-story structure, 35 x 20 feet. The lower portion is entirely used for school purposes, while the upper part is used as a boys' dormitory. A second building, three stories high, 40 x 26 feet, has two wings, 26 x 18 feet, and an addition, two stories in height. The lower story is suitable for culinary work, and the upper serves as a dining-room for the pupils. In one of the wings of our main building is the chapel, and the other is used at present as a store-room. The dormitory for girls is in the third story, which forms the Sisters' residence. One or two other rooms are used by the girls when learning sewing, dress-making, millinery, and other things which appertain to household duties.

Accommodation.—The establishment can house comfortably about sixty boarders, and, in fact, we have had fifty all winter and still have that number.

Attendance.—Out of the number of enrolled pupils—fifteen—there have been no absentees during the year.

Class and Progress.—I am glad to be able to state that the children are making satisfactory progress in all the common branches of instruction, and they are all anxious to improve in their studies. Some of the pupils are bright and intelligent,

notwithstanding the fact that they have been but recently taken from the wilds, and it is very gratifying to note their eagerness to surmount the difficulties they encounter in studying the English language. The younger ones particularly have abandoned Cree, and reply in the same language in which they are questioned by their teachers.

Industries Taught.—The boys assist the lay Brothers collecting cattle, attending the horses, preparing fuel, carrying water, &c. In the spring they are taught gardening, and in the fall they help to gather the crops. The girls are taught to sew, knit, mend and make new clothing, under the guidance of the Sisters, who are well versed in these things.

Moral and Religious Training.—The Fathers, with the assistance of the good Sisters, attend to the moral and religious training of the children with the most assiduous care. They spare no pains to enable these young hearts to love God and their neighbour, and to attend to all their religious observances. We can say that the children generally give entire satisfaction, and, as a result of this, we seldom resort to punishment as incentive to obedience.

Health.—We regret to report that one death occurred last February. The deceased was a young boy on whom consumption had laid its deadly grasp prior to the lad's admittance to the school. Apart from slight colds, we had little, if any, sickness during the year, and the general health of the children is good.

Water Supply.—The river, which flows about one hundred and fifty yards from the establishment, furnishes an abundant supply of water.

Fire Protection.—Besides the Peace river, the water from a creek that flows alongside our property affords sufficient protection against fire.

Heating.—The main building is heated by a 'New Idea' furnace, from the works of Gurney, Tilden & Co. We use ordinary box-stoves in the other houses. Wood is used exclusively as fuel.

Recreation.—In a pleasant yard in front of the school, under the personal supervision of the teachers, recreation is indulged in. Football is the chief sport in summer. The boys drill occasionally, and the girls have calisthenic exercises. During the winter months skating and tobogganing are the ordinary amusements.

General Remarks.—It pleases me beyond expression to testify to the unremitting zeal of those interested in the young school. Their efforts, together with the goodwill manifested on the part of the pupils, deserve special praise, and will certainly, with the blessing of God, be crowned with success.

I have, &c.,

SISTER SOSTENE,
Principal.

NORTHWEST TERRITORIES,
ST. ALBERT BOARDING SCHOOL,
ST. ALBERT, ALTA., July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith a report of the St. Albert boarding school, for the year ended June 30, 1901.

Location.—The school is situated about nine miles north of the town of Edmonton, Alberta. It is not on a reserve, but is situated in the St. Albert settlement and on the bank of the Sturgeon river.

Land.—The area of land in connection with the school and owned by the Corporation of the Sisters of Charity, is three hundred and thirty-five acres, situated in township 54, range 25.

Buildings.—The buildings are as follows : main building, 180 x 35 feet, which is used by the staff and girls. The boys are in a separate building, 50 x 30 feet. The outbuildings are : a bakery, a laundry, an implement shed, a meat-house, an ice-house, granaries, horse and cattle stables, besides numerous smaller buildings.

Accommodation.—There is accommodation for one hundred and eighty persons.

Attendance.—The present enrolment is seventy-seven, with an average attendance of seventy-three.

Class-room Work.—The public school programme for the Territories is followed.

Farm and Garden.—There are two hundred acres of land under cultivation, and with the exception of three hired men, the work is done by the boys.

Moral and Religious Training.—Careful attention is paid to the moral and religious training ; the conduct of the pupils being generally good, punishments are rarely resorted to.

Health and Sanitary Condition.—The health of the pupils was fairly good all winter. Towards spring we got a few light cases of the then prevalent epidemic of small-pox. All the other pupils were vaccinated.

Water Supply.—The water-supply is obtained by a hot-air pumping engine, giving five hundred gallons of water per hour.

Heating and Lighting.—The heating is done by two hot-air furnaces and stoves ; lighting by coal oil lamps.

Fire Protection.—A tank of fifteen hundred gallons capacity is in the attic. The water is forced there by a hot-air pumping engine and from thence it is distributed throughout the buildings. Four fire-extinguishers, twenty-two grenades and three axes are dispersed about the halls. The latter articles were supplied by the department.

We have besides, hose and six ladders, on, or around the buildings.

Recreation.—Recreation is taken three times a day after each meal, during which the pupils indulge in outdoor games.

I have, &c.,

SISTER L. A. DANDURAND,
Principal.

NORTHWEST TERRITORIES,
THUNDERCHILD'S (ST. HENRY) BOARDING SCHOOL,
THUNDERCHILD, SASK., July 8, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report for the year ended June 30, 1901.

Location.—The Thunderchild's boarding school is situated very near Thunderchild's reserve on the Roman Catholic mission property. It has been in operation since March 25, 1901.

Land.—The land in connection with the school consists of the southeast ¼, section 6, township No. 46, range 18, west of the third meridian, patented. This land is the property of the Roman Catholic mission ; it is a plateau with trees here and there, and is about one mile distant from the Saskatchewan river. It is adapted for any kind of grain.

Buildings.—The school building is 36 feet x 28 feet, and contains class-room, refectory, two dormitories, one for the boys and one for the girls, and the rooms indispensable for the persons who take care of the children ; also a kitchen, 14 x 16 feet. This building is government property, $2,500 being paid by the department to erect it. It is not painted. In connection with this school building, there is a laundry 12 x 16 feet, and a pantry 8 x 8 feet, which have been erected at a cost of $350. These two last mentioned buildings are not government property, as no grant was given by the department towards their completion.

Accommodation.—There are at present eleven pupils, who are boarders. The school is fine, and the pupils will be comfortable. The equipment is not yet complete.

Staff.—The staff of the school is as follows :—Rev. Father H. Delmas, O.M.I., principal ; Rev. Sister Saint Anselme, seamstress ; Rev. Sister Sainte Caroline, cook ; Miss Mélina L'Heureux, teacher.

Attendance.—All the pupils are boarders, and since the school has been open they did not miss a day, except two pupils ; one being sick, attended only seventeen days and the other attended thirty-one days. The school was open sixty-two class days during the quarter ended June 30.

Class-room Work.—The children are almost all beginners ; their work in class, consisted of learning the alphabet, spelling, reading, writing and arithmetic. They have improved very satisfactorily for the time they studied. The standing of the pupils is as follows :—

	Pupils.
Standard I.	9
" II.	2

Farm and Garden.—There is very little to be said this year in this respect, except that eighteen bushels of potatoes were planted and different kinds of vegetables were sown in the garden, such as : onions, turnips, pease, carrots, &c.

Moral and Religious Training.—A great deal of care is given to the moral and religious training of each child ; the teachers know that the children now in attendance will form society later on. When the Indian children who are accepted become

used to the ways of civilization, they will get less superstitious and more Christian. Stories—from which a moral teaching can be drawn—are selected to be told them.

Health and Sanitary Condition.—Each room in the building, where the children have to live, is provided with ventilators. An Eolian ventilator is placed on the roof. We have escaped the epidemics so prevalent elsewhere.

Water Supply.—A well will be dug near the building and a pump placed in the kitchen to supply water for all the other rooms.

Fire Protection.—There are two ladders on the house that could be used in case of fire. It would be well to have more fire-appliances on hand.

Heating and Lighting.—The building will be heated by stoves in which we will use wood. Coal oil lamps are placed in each room.

Recreation.—Each day recreation is given to the children from breakfast till nine o'clock ; a quarter of an hour in the forenoon during class-time ; from dinner till halfpast one ; a quarter of an hour in the forenoon and from four o'clock till bed-time. During the time of relaxation, the pupils are out of doors as much as possible ; a teacher is with them during the hours of recreation as well as during class hours. A part of that time is taken to teach manual work.

I have, &c.,

H. DELMAS, O.M.I.,
Principal.

NORTHWEST TERRITORIES,
BATTLEFORD INDUSTRIAL SCHOOL,
BATTLEFORD, SASK., June 29, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—The following report, in connection with this school, for the fiscal year just ending, is respectfully submitted in accordance with your circular of 4th inst.

Location.—The school is located on the south bank of the Battle river, about two miles west of the confluence of the Battle and North Saskatchewan rivers ; it is about two miles due south of the town of Battleford, which is our post office. It is built on Dominion lands reserved specially for the school by the department.

Land.—The total quantity of land reserved is nine hundred and forty-three acres, of which five hundred and sixty-six acres are in the immediate vicinity of the school, and three hundred and seventy-seven acres three miles to the east, reserved as a hay swamp. The land is all in township 43, range 16, west of the third meridian, and comprises parts of sections 15, 17, 18, 19, and 20. In the hay meadow we get nearly all the hay we require ; only a small portion of the land around the school is fit for farming purposes, the most of it is too light and sandy for anything but grazing purposes. We have about forty acres ploughed up.

Buildings.—These consist of the main building, in which are the pupils and most of the officers, principal's residence, two cottages, carpenter shop, blacksmith shop, store-room, stable, pig-pen, laundry, bakery, hen-house, root-house, granary, warehouse, and several small outbuildings.

Accommodation.—We could accommodate a hundred and fifty pupils—if we could get them—and the necessary staff to look after them. As in other schools, the difficulty here is to get all the pupils we want.

Attendance.—Admissions during the year, eight ; discharges and deaths, eleven. Number of names on roll in June quarter, ninety-nine. Average attendance during the year, ninety-eight.

Class-room Work.—This is carried on by two teachers, each in a separate room. The course of studies required by the department is adhered to. The attendance is on the half-time system, excepting in the case of the younger or backward pupils, who are allowed to attend full time as much as possible.

Farm and Garden.—Owing to the main portion of our farming land on the flat having been flooded in the spring, we were unable to get in more than about ten acres of grain. We have five acres in brome grass, and six acres in potatoes and other garden produce. Everything is coming on splendidly.

Industries Taught.—Farming and gardening, the care of horses and cattle, pigs and poultry, blacksmithing carpentering, kalsomining, painting, glazing, baking, dairying, laundry work, sewing, knitting, making and mending clothes, cooking and general housework.

Moral and Religious Training.—Morning and evening prayers on week days, the regular services and Sunday school on Sundays. Nearly every member of the staff takes part in the work of the Sunday school. We have a special prayer meeting every Wednesday evening ; many of the pupils, as well as several members of the staff, take part in this. A Circle of the 'King's Daughters' amongst the girls, and of the 'King's Sons' amongst the boys, and a 'Daily Scripture Reading Union,' including both girls and boys, have been organized and carried on for some time past with very good results. The meetings of these societies are managed by the pupils themselves under the general direction or supervision of some of the staff. The moral and religious training of the pupils is felt to be the one factor in the formation of character, the building up of true manhood, true womanhood, true citizenship. Our daily prayer, repeated in unison, is 'that true religion and honest industry may here for ever flourish and abound.'

Health and Sanitary Condition.—The general health of the staff and pupils has been good. The ventilation, and sanitary arrangements generally, have been spoken of favourably by the medical officer. Swill, garbage, and all rubbish, &c., are either burned or removed to the regular nuisance ground at a safe distance.

Water Supply.—Our main well having failed us, we are connecting the water system in the school with a good spring some little distance away on the premises, a spring from which we have been hauling our supply of water for some time past ; the water is of very good quality, and the supply plentiful. We have several cisterns in the ground near the buildings in which to collect soft water from the roofs.

Fire Protection.—We have a number of Babcock fire-extinguishers, and hand-grenades, also axes and pails placed in different parts of the school, also four tanks which are kept supplied with water. From the two upper tanks pipes come down to the lowest floor, and on each flat there is a length of hose attached to the pipe. During the year the McRobie stationary fire-apparatus was placed in the main building.

Heating.—The buildings are all heated by furnaces and stoves, wood being the only fuel we can get here. We use about six hundred cords a year.

Lighting.—Ordinary lamps with coal oil are all we have.

Recreation.—Swings, gymnasium-apparatus, football, with various other games, and lots of outdoor exercise.

General Remarks.—Three of our ex-pupils are now teaching school, one in Ontario, one in Manitoba, and one in Athabasca, while another ex-pupil is attending St. John's college, Winnipeg, studying for the ministry. Two of the others (girls) are doing good work as servants in one of our boarding schools.

As a rule the ex-pupils who strike out for themselves do well ; when failures occur it is amongst those who, having returned to the reserves, come under the control or influence of the older non-progressive Indians, and even the most of these do well.

The members of the staff have done faithful work during the year, and good results are following their labours and their example.

I have, &c.,

E. MATHESON,
Principal.

NORTHWEST TERRITORIES,
CALGARY INDUSTRIAL SCHOOL,
CALGARY, ALTA., June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report on the school under my charge, for the fiscal year 1900-1901.

Location.—The school is situated on the south bank of the Bow river, about five miles below the city of Calgary. It is not on an Indian reserve. One half the land in connection with it was given by the city of Calgary, and the other half was purchased by the department.

Land.—The land comprises the whole of the southeast quarter of section two, township twenty-four, range one, west of the fifth meridian, together with that portion of the northeast quarter of section twenty-three, township twenty-three, range one, west of the fifth meridian, which lies south of the river. The total area is about two hundred and ninety-two acres.

The total area of the land available for cultivation is not much over fifty acres; the greater part being only of use for pasturage, being bench land, with a substratum of gravel and boulders; very little below the surface.

There is practically no hay land at all, so that we are dependent on cultivated crops for fodder, except when we are fortunate enough to be in a position to make arrangements with our neighbours to cut on shares.

Buildings.—The buildings have not increased since last report. They comprise : (1) main school building; (2) farm instructor's residence; (3) carpenter and paint shop; (4) cold storage for meat and dairy purposes; (5) laundry and bakery; (6) stable and barn.

The main building, as it now stands, comprises but one wing, it not having been completed in acordance with the original plan. The new buiilding, built as a laundry and bakery, is at present occupied by the principal as a residence, as the quarters available in the main buildings are too cramped.

Accommodation.—In our main dormitory we have at present thirty-two beds. In a smaller room on the same flat, we have six more, and in another room on the next floor, we can accommodate eight more, making a total of forty-six. By squeezing, in the main dormitory, that number might be increased to fifty, and that would make the utmost limit of the school.

There are five rooms available for the staff, four of which are occupied, whilst one is used as a sewing-room, and reserved for use as a bed-room for visitors, officials and inspectors.

Attendance.—We finished the year with eight more pupils on the register than the number with which we commenced :—

On register June 30, 1900		38
Admitted—		
Sarcees	5	
Blackfeet	3	
Bloods	4	
Total enrolment		50
Discharged 1900-1901—		
Bloods	2	
Blackfeet	1	
Died (at home)—Sarcee	1	
Total discharges		4
Remaining on register June 30, 1901		46

Three of those registered are at home on sick leave, one of whom is not likely to recover sufficiently to enable him to return to school, whilst the honourable discharge of several others is pending.

Class-room Work.—This is still under the direction of Mr. Mills. The curriculum ordered by the department is fairly well adhered to, but the progress of many of the pupils appears slow. At our periodical public entertainments the pupils show to advantage.

Farm and Garden.—Mr. Young remains with us in charge of this department.

The crops harvested last fall were again satisfactory, the oats being a particularly good sample. About forty acres were under cultivation, mostly in roots and garden stuff. The crops give promise of fair results for this fall, though the very backward and cold spring has lightened the root crop considerably.

The cattle are doing well.

Industries Taught.—The boys continue to do the work of the house in a satisfactory manner, sweeping, scrubbing, cooking, laundry work, mending and darning clothes, being done by them under supervision.

Carpenter Shop.—This remains under the care of Mr. Pippy. I do not think I can add anything about this department to what I have previously reported. The lads under his care do excellently. The tools are well taken care of, and any work done for the institution is carefully executed, in the most workmanlike manner.

Three of the pupils have been employed as journeymen carpenters at the Blackfoot agency, and the agent reports satisfactorily in regard to them.

Moral and Religious Training.—There have been no serious breaches of discipline to be reported. The pupils still take a keen interest in our services, and some of the elder ones are showing more appreciation of the responsibilities of life. Several have been attending confirmation classes with good results.

Health and Sanitary Condition.—The health of the pupils has been generally good. Some few cases have been ordered by the medical officer to the hospital in Calgary, whilst three, as reported above, have been sent home for the summer to live as much in the open air as possible.

The sanitary condition of the school and premises is good.

Water Supply.—This is entirely dependent on a well close to the house, and on our hot-air engine being in good working order. As it is run by the pupils, it is sometimes out of order, but usually it works fairly well, especially now new repairs have been inserted.

Fire Protection.—Of this we have ample in the main building. On each flat there are two lengths, fifty feet long, of rubber hose, one attached to the McRobie chemical protection system, and one to the pipe from our water tanks in the attic.

The McRobie system was inserted by the department this year at a cost of about four hundred dollars. Fire-pails kept filled are in handy places, and small Star chemical machines are also at hand.

Heating and Lighting.—The heating is done by two 'Economy' combined hot-air and water furnaces. The lighting is done by means of small coal oil lamps.

Recreation.—The main recreation of the pupils is football. Our football team this season tied with the winners of the challenge trophy of the Northwest Territories. At other seasons of the year fishing engages their attention in spare time.

In August, 1900, we inaugurated an athletic meet for the pupils, at which many visitors from Calgary were present, and expressed their surprise at the sportsmanlike manner in which these Indian boys took part in the ordinary white man's sports.

I have, &c.,

GEO. H. HOGBIN,
Principal.

NORTHWEST TERRITORIES,
QU'APPELLE INDUSTRIAL SCHOOL,
LEBRET P. O., August 9, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report for the fiscal year ended June 30, 1901.

Location.—This school is situated in the Qu'Appelle valley, four and a half miles east of Fort Qu'Appelle and eighteen miles north of the Canadian Pacific railway ; though twenty-four miles from Qu'Appelle station by the trail. It is in a central pcsitior for the Assiniboine, Crooked lakes, File Hills, Muscowpetung, Touchwood Hills and Sioux reserves.

The site is picturesque, the buildings being on a slightly elevated flat between two large bodies of water ; fronting to the west and south on the Qu'Appelle lake, with the village of Fort Qu'Appelle in the distance ; to the north are steep hills of irregular formation some three hundred feet high, divided by a broad wooded valley running in a northerly direction, and containing a small creek, while the eastern view presents the Katepwe hills and lake in the distance, and in the immediate vicinity the village of Lebret.

Land.—The area of land belonging to the school and immediately surrounding it comprises about six hundred and fifty acres ; it was specially surveyed and reserved for the purpose by the Department of the Interior, and is made up of parts of sections 2, 10 and 11, townships 21, range 13, west of the 2nd meridian. Of this land about one hundred and fifty acres are under cultivation in three fields and two gardens, the remainder, consisting of hills and broken land, is only fit for grazing.

Besides the above, and about six miles northeast of the school, we have three-quarters of sections reserved for hay purposes ; of these the north east $\frac{1}{4}$, section 34, township 21, range 13, west of the 2nd meridian, was bought by the department, and has about seventy-five acres of land under cultivation, the remainder is cut up by shallow sloughs, which yield a fair amount of hay in wet seasons ; the other quarter sections are the northwest $\frac{1}{4}$, section 34, township 21, range 13, and the northwest $\frac{1}{4}$,

section 22, township 21, range 13, both west of the 2nd meridian. These are mostly scrubby and rolling, and supply a fair amount of hay in wet seasons, besides a valuable winter grazing ground for horses not in use.

All the above parcels of land are fenced in with barb-wire.

Buildings.—The main block is frame, brick-veneered, and is composed of three adjoining three-storied buildings, viz., the boys' building, 90 x 70 feet, with gymnasium addition on the north, 35 x 80 feet ; the girls' building, 80 x 50 feet, joins the boys' at the southeast corner, and the small childrens' and hospital building, 60 x 40 feet, is connected with the girls' building at the southeast corner.

Basements extend under most of the buildings and contain the heating plant and pumping engine, large coal bins, and store-rooms for roots and vegetables.

The first floor of this block is divided into class-rooms, dining hall, recreation-rooms, parlours, kitchen, pantries, lavatories and halls. The second floor consists of dormitories, sewing-rooms, offices and lavatories. The third floor includes chapel, hospital, doctor's dispensary, dormitories, employees' rooms, store-rooms and tanks for domestic and fire-protection purposes.

Connected to the main building and built of lumber, not yet veneered, are the Indian reception-room, ice-house, provision store, fire engine-house and girls' closets.

The following buildings are separate from the main building and from each other, are of frame construction, and stand in two rows facing on a lane running north and south ; windmill for crushing grain and sawing fire-wood ; boys' closet, sheds for coal, lime and general storing purposes, bakery and flour store, carpenter-shop and lumber shed ; blacksmith-shop, with tin-shop above it.

North of these buildings and of the main roadway that runs east and west and forming three sides of the barn-yard, are the stables, barns, granary, pig-sty and implement sheds.

On the lake shore directly in front of the main entrance to the school is the laundry, a building that is in rather too conspicuous a position at present, and which is in serious danger of being demolished by the ice in the spring ; last spring a large portion of the foundation wall was knocked away ; the level of the lake has been raised considerably by dams since this building was erected.

Accommodation.—The accommodation is ample for two hundred and twenty-five pupils and twenty-five employees.

Attendance.—The attendance for the year has averaged one hundred and two boys and one hundred and twenty girls ; a total of two hundred and twenty-two ; several of these were under age and only drew half the per capita allowance.

Class-room Work.—Of the two hundred and twenty-seven pupils enrolled at the end of June, one hundred and four were boys and one hundred and twenty-three were girls. The grading, under the schedule of studies prescribed by the department, was as follows :—

	Boys.	Girls.	Total.
Standard I.	21	21	42
" II.	17	28	45
" III.	46	40	86
" IV.	10	24	34
" V.	10	10	20

The first and second standards attend class six hours each school day, when practicable, in order to become as proficient as possible in the use of the English language before learning any industry. The higher standards attend class half each day, and work at trades the other half day as a rule. In busy seasons on the farm and garden all the boys are engaged the whole day at outside work, and this year, owing to the rank growth of everything, all the girls were also repeatedly employed the whole day weeding and thinning out vegetables and roots.

Farm and Garden.—The area under cultivation is two hundred and twenty-five acres, made up as follows : fifty-five wheat, thirty-five oats, fifteen barley, four speltz, twenty-five oats for fodder, four pease, ten potatoes, half an acre corn, one mangolds, one turnips, half an acre carrots, four garden, nine brome grass, twenty-five summer-fallow and thirty-six breaking. During the year we had three changes of farm instructor, no doubt this had a detrimental effect on the farming operations and on the progress of the farm boys. The present instructor has farmed successfully in the Northwest for a number of years and appears to be will qualified for the position.

Sixteen boys worked regularly on the farm most of the year. Since seeding, an assistant farmer has been employed ; our fields being too far apart, and the boys being found too small to do the work efficiently otherwise. Besides the regular boys and girls or boys whose turn it was to milk, the whole school assisted when necessary on the farm and in the garden.

Our crops were almost a complete failure last season ; the land under cultivation happened to be that situated just on top of the hill, which is light, and having a southern exposure the snow melts rapidly and drains into the valley before the ground is thawed enough to absorb it. What seed germinated in the spring died, owing to the continued drought, and though a heavy rain fell at the end of June, causing quick germination and rapid growth of any seed that remained good, still the crops were too late to ripen and were cut and used as fodder. Of our farm produce we were only able to store away for winter use fifty bushels carrots, six hundred bushels potatoes and four hundred bushels turnips ; from the garden, by the expenditure of a great deal of labour in carrying water, we secured an abundance of cabbage, beets, parsnips, cucumbers, citrons, melons, marrows, squashes, pumpkins, tomatoes, rhubarb, celery, &c.

Stock.—Our stock are in good order and comprise one bull, fifteen cows, six heifers, three calves, thirty-nine swine and a lot of poultry.

Two teams of horses were purchased during the year, and we now have eleven work and driving horses, five native ponies and one pony colt.

The cows are milked by the girls in the summer-time, and by the boys during the rest of the year.

The appearance of the growing crops promises an abundant harvest, and all are well advanced for the season of the year.

Industrial Work.—(1.) *Blacksmith Shop.*—Five boys worked at this trade and did a good deal of custom work, besides all required for the school.

(2.) *Boot Shop.*—Fifteen boys assisted the shoemaker making and repairing boots and harness.

(3.) *Bake Shop.*—All baking for the institute is done here, besides which the baker and his assistant boys pickle pork, provide the house with ice and cut meat into suitable sizes for the kitchen.

(4.) *Carpenter Shop.*—Eleven boys were attached to this shop, as next to farming this is the most useful industry they can acquire. A great variety of work was done both for the school and outsiders in carpentry, cabinet-making, repairing vehicles and implements.

(5.) *Paint Shop.*—The furnace and night watchman instructs the boys in this department ; as we are short of big boys and it is unlikely any will follow this trade for a living, none are permanently attached to this shop. Besides doing the painting, plastering, stone and brick work, the fire-appliance is kept in working order by the furnace and night watchman.

(6.) *Tinsmith Shop.*—Usually some of the blacksmith boys work with the tinsmith when he requires any help. Besides doing the tinsmithing and plumbing for the school, he attends to the wood-sawing and the gasoline pumping-engine.

Girls' Work.—Under direction of the reverend Sisters the girls learn all kinds of housework, cooking, dairying, laundry work, and make their own clothes and greater part of those worn by the boys. They assist in the garden, milk the cows in the summer-time, and have entire charge of the poultry.

Moral and Religious Training.—All the employees are required to set a good example and develop as much as possible a sense of responsibility in the pupils. The assistant principal and teachers attend specially to their moral training and manners. On Sundays and every day during winter months, I hold a class for the whole school, when I give religious instruction for one hour after class hours. Chapel is attended night and morning daily, and the Lebret church morning and afternoon on Sundays.

Conduct.—The conduct is very satisfactory.

Discipline.—As there is a regular system and efficient staff, there is no trouble in maintaining order.

Health and Sanitary Condition.—The health has been very good, we had a few cases of chicken-pox, whooping-cough, pneumonia, and the usual minor complaints to be expected where there are so many children. The physician in charge inspects frequently, and conditions conducive to health are maintained by an abundant use of vegetables and wholesome food, carefully prepared ; by cleanliness of person and premises ; by clothing adapted to the season, and by plenty of outdoor exercise, drill and calesthenics. Ventilation and sanitary conditions are good.

Water Supply—Water for fire-protection and domestic use is obtained from one well by means of a one and a half horse-power gasoline engine and pump, which does excellent work and is a marked improvement on the little hot-air pumping-engine which I reported last year as being overtaxed and which soon broke down altogether.

Fire Protection.—Our fire-protection appliance consists of three fireman's axes, one Babcock extinguisher, eighteen chemical extinguishers of different makes, ninety-eight hand-grenades, and thirty-five fire-pails, all under the supervision of the fireman and night watchman. Large tanks in the garrets of each of the three buildings provide a large amount of water and are always full and are connected with discharge pipes that have connections and fifty feet of hose on each floor of the boys' and girls' buildings. Ample means of escape are provided by ten stairways on the first floor, six stairways on the second floor, and two stairways to the garrets, where no one sleeps. There are always several ladders in serviceable condition at the carpenter shop.

Heating and Lighting.—Seven hot-air furnaces, supplemented by a few stoves, heat the main block very comfortably ; the shops are heated by stoves. Lamps burning coal oil and acetylene gas supply the light.

Recreation.—In outdoor games our boys have been successful in football and athletic sports ; they have a large play-ground, and roam about the surrounding hills. The girls have a large tree-shaded play-ground, with swings, seats, and other means of recreation. In summer-time both boys and girls enjoy bathing in the lake, and in winter-time they skate upon it. Both boys and girls use the gymnasium. The library books are well patronized. The indoor games in vogue are those usually found in white schools. The brass band is an attraction, and is led by one of the pupils. The boys and girls are generally fond of music. Several public entertainments were given to appreciative audiences.

Admissions and Discharges.—Twenty-three children were admitted during the year : eleven boys and twelve girls. Thirteen pupils were discharged : six boys and seven girls ; of these some were married, some are building and preparing homes, some are breaking land, some are working out, and some are living with their parents.

Ex-pupils.—The majority of those who are able to, have a home of their own ; many are hard-working, thrifty and progressive, and are turning to profitable account the training they have received. Few having means to start for themselves, their progress is uncertain after leaving the routine and discipline of the school, and

depends very much on their environment whether they marry and settle down, or have to live with their parents, who, if pagan, too often exercise a detrimental influence over them. I am very pleased to see the department is taking an active interest in them after leaving school, and am glad to report that boys going back to the several reserves of the Qu'Appelle agency are given special supervision and put to work at once and kept at work, and it afforded me much pleasure to see nearly one hundred acres of land newly broken on one end of the File Hills reserve by graduates of Regina and this school, who, before the season is over, hope to greatly enlarge this area.

Our old blacksmith boys do most of the surrounding reserve work ; and several of the old carpenter boys are working on buildings for white people this summer.

At the last reunion of ex-pupils nearly une hundred, with their families, assembled at the school and spent a very enjoyable time renewing old acquaintance. In the football match, 'Past *vs.* Present,' the present boys won after a hard game, and in the athletic sports honours were about evenly divided. The ex-pupils were well dressed, well behaved, healthy and prosperous-looking ; and were a credit to themselves and the school.

Several of the second generation are in the school and they are mostly bright children.

General Remarks.—Good reports continue to be received of our out-pupils ; the girls in service command the highest wages in the best families.

A very large number of visitors from all parts of the world, breaking their transcontinental journey and attracted by the rich farming country, the shooting and hunting, or the beautiful scenery of the Qu'Appelle district and lakes, paid a visit to the school.

Major McGibbon made his annual inspection of the school and audited the books, and though not in favour of the double-entry system, consisting of journal, cash-book, and ledger, from which a trial balance is taken and an itemized statement forwarded the Indian Commissioner each month, expressed himself as highly pleased with the class-work, management and our financial standing.

About one hundred and fifty pupils spent two days at the File Hills agency on the occasion of the third annual agricultural fair, held there by the Indians last June, under the auspices of their agent, Mr. Graham.

From our nursery we were able to supply several thousand red, white and black currant bushes, elms, maples, poplar and carragina, one and two year old rooted slips and seedlings, as well as rhubarb roots, and cabbage and tomato plants, and I was particularly pleased at many of our old pupils making applications in this line.

Arbour day was kept, and we planted spruce trees, exchanged with the Rat Portage boarding school, Manitoba, and the High River industrial school, Dunbow, Alberta.

In conclusion, I would say that the Indian agents on the surrounding reserves have given me great assistance ; that when there has been necessity for their services, the Northwest Mounted Police have always been prompt and efficient ; and that my present staff and employees are performing their duties in a satisfactory manner.

I have, &c.,

J. HUGONARD,
Principal.

NORTHWEST TERRITORIES,
RED DEER INDUSTRIAL SCHOOL,
RED DEER, ALTA., July 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The school is situated on the north bank of the Red Deer river, about three miles due west of the town of Red Deer, Alberta.

Land.—The area of land belonging to this school is four hundred and eighty acres. We have also a lease of six hundred and forty acres for grazing land and six hundred and forty acres reserved for hay lands. The hay lands have, unfortunately, been very little used for the past two years, being covered with water.

Buildings.—The buildings, which are the same as reported last year—with the exception of an addition to the ice-house—are as follows : a stone building, occupied by the girls and female members of the staff. This building contains the offices and inspector's room. Brick building, occupied by the boys ; dwelling-house, occupied by the principal; dwelling-house, occupied by the assistant principal; dwelling-house, occupied by farm and carpenter instructors ; blacksmith shop, used as a store-room; carpenter shop, ice-house and refrigerator combined, this building is now 16 x 36 feet; pig-pen, well-houses, two in number; cow stable, horse stable, drive-shed, hen-house, dairy, store-room, engine-house, and three closets.

Accommodation.—We have accommodation for ninety pupils and a staff of ten.

Attendance.—There has been an average attendance of fifty-seven during the year, although the number authorized by the department is eighty. Considerable difficulty is experienced in obtaining children from the reserves.

Class-room Work.—The progress in the class-room has been fair. The number enrolled at the end of the year was thirty-nine boys and twenty-three girls. They were graded as follows :—

	Pupils.
Standard I.....	10
" II.....	23
" III.....	14
" IV.....	11
" V.....	4
	62

Farm and Garden.—We have about one hundred acres of land broken in connection with the school, forty of which we were unable to crop this year on account of the wet. The land was so soaked that it was impossible to put in a crop.

Fifteen boys are engaged on the farm. All boys, during their stay at the school, work in this department. Our crop is as follows : oats, forty-five acres ; potatoes, five acres; turnips, five acres; garden, five acres.

Industries Taught.—*Carpenter Work.*—During the year five boys have been engaged in the carpenter's shop. Along with the instructor, they have built a refrigerator and store-room, and have done all the repairs to the buildings.

Housework and Sewing-room.—All the girls are taught housework, butter-making and sewing; some become very apt indeed. After great difficulty and many objections on the part of parents, I have arranged for a few girls, when they receive their discharge, to take situations as domestic servants in carefully selected homes. I am pleased to be able to report that in every case the conduct of the girls has been very satisfactory.

Moral and Religious Training.—The endeavour of all is to give the pupils right ideas regarding truth. I am pleased to report that the seed sown is bearing fruit, and that both boys and girls are more willing and obedient.

Health and Sanitary Condition.—The health of both staff and pupils during the past year has been good. Although on every hand we have had infectious disease, yet we have kept free. The sanitary condition is good.

Water Supply.—Our water-supply is now very satisfactory. By the aid of our steam-pump we have all we need from the Red Deer river.

Fire Protection.—The school is supplied with five Babcocks, three Star engines, six Star-Durands, eighteen grenades, ten axes, four hose-pipes, with fittings. These however, are not of much value, as they are very large and heavy. A fire-escape is attached to the girls' building, and the means for leaving the boys' wing are satisfactory. The greatest care is exercised to prevent an outbreak of fire.

Heating and Lighting.—The heating has been, on the whole, satisfactory. The stone building is heated by two furnaces, made by the Smead-Dowd Company. The brick building is heated by a large furnace, made by the Pease Company. The principal's house is also heated by a Pease furnace, and the other buildings are heated with stoves.

The whole school is lighted with coal oil lamps, which are at once dangerous, dirty and expensive.

Recreation.—Care is taken that due time is given for recreation. Both boys and girls are fond of outdoor sports.

Staff.—I am pleased to report that, on the whole, the duties to be performed by the staff have been done in a satisfactory manner. Dr. Denovan, our medical officer, has been most attentive.

General Remarks.—It has been my duty during the past year to visit most of the reserves in this neighbourhood, where I have seen many of the ex-pupils. I have also received reports from Indian department officials who came in contact with them, and in most cases I have been pleased with what I have seen and heard. The training they have received here has been most useful.

I have, &c.,

C. E. SOMERSET,
Principal.

NORTHWEST TERRITORIES,
REGINA INDUSTRIAL SCHOOL,
REGINA, ASSA., September 18, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the annual report in connection with this school for the year ended June 30, 1901.

Location.—The school is situated on the north half of section 28, township 17, range 20, west of second meridian. The site of the buildings is a beautiful one on the

high banks of the winding Waskana creek, affording splendid facilities for drainage, and commanding a fine view of the country for many miles around. The territorial headquarters for the Northwest Mounted Police, the Lieutenant-Governor's residence, the legislature buildings and the town of Regina are all in full view from the front of our main building, while a Canadian Pacific railway train can be almost continuously seen on a clear day while it travels over twenty miles of road. The grounds are artistically laid out with roadways and walks, bordered with trees and flowers, and, owing to the rolling nature of the surface of the ground, will present a very fine appearance when our hundreds of young trees have advanced a little further in the growth.

Land.—Besides the three hundred and twenty acres belonging to the school, nearly all of which is under cultivation, the department has leased a section—six hundred and forty acres—lying directly west of us—for grazing purposes. The soil is all good and well adapted for farming and gardening.

Buildings.—The main building is of solid white brick, resting on a fine foundation of dressed sandstone, and consists of two flats, besides a splendid basement and an attic. The basement, which has an eight-foot ceiling throughout, furnishes ample room for the seven large furnaces and plenty of fuel, besides a winter play-room for boys, and a neat little dairy. On the first floor are the following rooms all well lighted :—

Assembly-room, sometimes used as a class-room and recreation-room, large central hallway and two smaller halls on the girls' and boys' sides. Reception-room, office, dispensary and photographer's dark-room, senior class-room, little boys' dormitory, pupils' dining-room, staff's dining-room, kitchen, sewing-room, scullery, pantry and kitchen store-room.

On the second flat are : two large dormitories, situated in the extreme north and south wings of the building ; little girls' dormitory in the west wing, three corridors, two wash-rooms, two bath-rooms, two clothing store-rooms, ten private teachers' rooms.

In the attic are four store-rooms for winter clothing, one large water tank, and access to two smaller water-tanks, also much room for general storage.

Besides the main building there are the following buildings on the grounds : principal's residence, brick veneered ; cottage hospital, frame, one story ; carpenter instructor's cottage, frame, one story ; trades building, frame, containing shoe-shops, printing office, hardware store-room, paint-shop, carpenter-shop, with lumber-house attached ; laundry building, frame, two story; two implement sheds; cow stable, frame; horse-stable, frame, with stone basement ; hen-house, hog-pen and boiler-house attached ; bake-shop, containing brick oven and grocery store-rooms ; blacksmith shops, ice-house, containing cold storage room for meat ; granary, root-house, pumping engine-house, garden tool-house, lumber-house, grain-crusher house, boys' outside closet and girls' outside closet.

In the early summer we found that our cold storage for meat would not keep a quarter of meat until used. It has been replaced with a modern refrigerator which will keep meat for two weeks in the hottest weather if necessary. It is 6 x 7 feet, by 8 feet, 6 inches high, with walls a foot thick, containing two dead-air spaces and a space filled with coal ashes, giving almost perfect insulation. Beside it, is a cutting and weighing-room, and above the latter and between the two ice-bins of the ice-house is a platform on which the ice is washed and shoved into the ice-rack of the refrigerator, provision being made to have the water used in washing the ice run outside carrying all saw-dust or dirt with it. Since this cold storage was furnished we have lost no meat. It was found necessary to make provision to keep at least a quarter of beef, as loss is incurred in taking less than a quarter at a time under a yearly contract. Besides the cold storage the boys have now almost completed a new blacksmith shop 12 x 20 feet on which they have also done good work.

It was also found necessary to overhaul the pumping engine and put it on a more solid foundation. This necessitated moving and putting a new foundation under

the pump-house, also, which has been done. The engine now stands on a solid concrete bed, and the boys are almost done putting extra sheeting on the inside of the house so as to make it frost-proof.

Accommodation.—There is accommodation for one hundred and forty pupils without any crowding, and in addition private rooms for ten members of staff.

Attendance.—The average attendance during the year was ninety-five, consisting of fifty-five boys and forty girls. During the winter the average was about one hundred, but the discharge of twenty in April, and the loss of half a dozen since then through sick leave, death and marriages has cut down our average seriously. But the prospects are good for securing at least as many recruits before winter.

Class-room Work.—The regular school-room hours are from 9 a.m. to 12 noon, and from 1.30 p.m. to 4.30 p.m. The older pupils all spend half of every day in school, and half at some kind of industrial work, excepting during a busy season when they often spend all day at work. But in all such cases they are sent to school all day in slack times, sufficient to make up for previous class-time lost. Small children attend classes all day.

One teacher has attended to all school work during the summer, but two are employed during the winter months. The pupils are arranged in classes according to the departmental studies, as follows :—

	Pupils.
Standard I.	31
" II.	21
" III.	22
" IV.	15
" V.	12

Farm and Garden.—Last year we produced from the farm and garden the following quantities of grain, hay and vegetables in spite of the drought : wheat, four hundred and seventy-two bushels ; oats, four hundred and twenty-four bushels ; rye, twenty-six bushels ; potatoes, six hundred and twenty-five bushels ; carrots, ten bushels ; turnips, two hundred bushels ; beets, twenty-five bushels, cabbage, one hundred and fifty heads ; celery, five hundred bunches, and fifty loads of brome grass hay. This was in addition to what fresh vegetables were used on the tables during the summer.

The acreage of crops this year is as follows : wheat, forty-five acres ; oats, thirty-six acres ; pease, one-half an acre ; potatoes, six acres ; garden, three acres ; brome grass, fifty acres, and rye-grass (for seed) two acres. Besides this a summer-fallow has been well tilled in preparation for wheat next year.

On my visit last March to Hampton industrial institute for Indians and negroes in Virginia—the oldest Indian industrial school on the continent—I was struck with the success of the garden-plot system, which is extended to even the kindergarten pupils in that institution.

On a small scale we tried it here this season, selecting twelve of the best pupils—six boys and six girls—and assigning to each a garden-plot 23 x 40 feet. Each plot was prepared and planted by hand by its owner, under instruction. Each plot contained twenty-three kinds of vegetables, and was surrounded by a border of flowers a foot in width. Each plot-owner was promised one-third the market value of whatever stuff was raised on the plot, and in addition three prizes were offered for the three best boys' plots and three for the three best girls'. The result has been most satisfactory. Stimulated by a sense of ownership and stirred by competition, these pupils have learned more about gardening this season than they would during many seasons in the common garden. Besides the contrast between the appearance, progress and yield of the plots, as compared with the adjacent common garden was a most striking object lesson on the value of keeping the soil moved about plants especially in dry

weather. Every visitor in July and August fancied that the plots must have been planted at least a month earlier. As a matter of fact they were not put in a week earlier, but the owners were on them for a little while—time stolen from play—almost every day. We hope to extend the system next season.

The farm stock consists of one bull, eleven cows, two heifers two year old, one heifer calf, twelve horses, two foals, twenty-four hogs and sixty hens.

Industries Taught.—Besides the farm and garden work, instruction is given in carpentry, painting, glazing, baking, and printing. The instruction in these lines is followed in such a way as not only to teach those so disposed to learn trades, but so as to utilize the educational function of manual work. An effort is made to get pupils to think as much as possible by means of tools and materials. This often means loss of time and materials, for the boy thinks harder over his mistakes and failures than over instruction volunteered. To allow trades boys to make mistakes often means loss in money, but gain in thoughtful boy, a commodity beyond value. Recognizing that it is only the very small minority of the boys who will follow trades in this distinctively farming country, the industrial instruction is shaped rather toward making thoughtful 'handy' farmers than tradesmen. Of course, at the same time, any pupil showing special mechanical genius, is encouraged to follow his bent, and we have at present one of last spring's graduates on the carpenter staff at the Mounted Police headquarters giving good satisfaction.

The girls are taught practical housework, not only in connection with the school housework, but at both residences. In the residences they are taught to assume the full duties and responsibilities of housekeeping and cooking for a family. Besides, the girls have instruction in the dairy and laundry. For the present year we are promised periodical lectures, and practical lessons, by Government Creamery Inspector Wilson, through his generous interest in the school, and the courtesy of the Department of Agriculture.

Moral and Religious Training.—Regular religious services are conducted on Sundays, morning and evening. On Sunday afternoon Sunday school is held, and the international scheme of lessons followed. The hour for daily morning and evening prayers is also utilized for the giving of religious instruction by myself and assistants, an effort being made each day to fasten some one important truth in the memory. By earnest appeals to pupils, in public and private, and by strict discipline, we seek to form character.

Health and Sanitary Condition.—The general health of the pupils has been good during the year. One death occurred in the school from consumption. The number of scrofulous cases has greatly decreased under proper treatment. All pupils are weighed and measured once a month, in order to detect the first beginnings of disease or lowered vitality, so as to take these cases in time. By good nutrition, good ventilation, and greater care of all soiled handerchiefs and clothing, we hope to still further reduce tubercular diseases. During the spring the sewer system has been opened up and repaired. Man-holes at regular intervals have been placed in connection with the sewer pipes, so that they can be regularly flushed out, without the delay and expense of excavation. The addition of the new windmill to the cess-pit has proved to be a great relief.

Water Supply.—The water-supply continues to be very satisfactory. The hot-air engine gives good satisfaction, and no difficulty has been experienced from frost.

Fire Protection.—Little or no difficulty is experienced in keeping our three tanks in the attic filled with water by means of the Ryder hot-air pumping-engine. This affords an excellent protection against fire. Two large fire-escape ladders are kept in convenient places ; six hose-reels, with hose attached, are placed in various parts of the main building and attached to pipes from the tanks and ready for immediate use. In the main hall upstairs, twelve fire-pails are kept full of water. Hand-grenades are kept in nearly all the buildings, including stables, laundry, printing-office, and car-

penter shop. In the main building a part of one of the rooms is reserved for fire-appliances, including four fireman's axes, three patent fire-extinguishers, twenty-four grenades, and four Semple fire-extinguishers. In addition, there was added during the year a McRobie chemical engine placed in the basement, which in itself is almost sufficient protection for the whole main building.

Heating.—Seven Smead-Dowd furnaces heat the main building satisfactorily, but at too great a cost. They consumed one hundred and forty-eight tons of coal last year and ninety-three cords of wood. I have discovered that this is greatly due to imperfect air circulation, caused partly by the imperfect heating of ventilating shafts, and partly by an interruption of the Smead-Dowd ventilation system, when the closets were removed. Before cold weather we hope to have these defects remedied in the interest of both health and finances.

Recreation.—Football continues to be the most popular game among the boys, although lacrosse had its turn this season. Good success has attended them in their various matches, and what was better, they won the reputation of playing a notably clean game. Not only for the sake of the outdoor exercise involved, but because of the moral value of manly games as educators, we give such sports all possible encouragement. Considerable hunting is also done by the older boys in season.

General Remarks.—The fourth annual graduating exercises were held in April. The class numbered twenty, most of whom are doing well for themselves. Agent Graham, of Qu'Appelle, authorizes me to mention the record made by Willie Bird and Ben Assurlawasis who, although late in starting, have broken forty and thirty acres respectively on the reserve. Napoleon Sutherland, of the Duck Lake agency, a former graduate, has one of the finest wheat crops I have ever seen. John Kasto, one of last spring's graduates, is giving fine satisfaction as assistant to Rev. Mr. McKittrick, missionary to the Indians on Lake of the Woods. Clara Williams, another graduate, has won a reputation as matron in the Indian boarding school at Alberni, B.C., while John Hunter and Herman Nowekeeswape are both efficient members of our own staff. Many other ex-pupils are also reflecting credit on their alma mater.

Before closing this report I must take occasion to bear testimony to the terrible loss sustained by this institution in the death of its late principal, the Rev. A. J. McLeod, B.A. In taking up the work when he left off, I have been daily struck with some new phase of his capacity and devotion. Stricken down without warning, most men in full charge of a work of the magnitude of his would have left some of their work in confusion. Not so with Mr. McLeod. Apparently he was in the habit of leaving each day's work so complete that it could be taken up by another without interruption.

In the systematic arrangement of work and equipment, I have been constantly reminded of his capacity for organization. In his office books, apparatus, arrangement of supplies and stores, I have been constantly struck with his neatness and order. In the elaborate buildings and improvement we have telling evidence of his energy and unremitting toil during the last ten years ; and in the way in which his memory is sacredly held by pupils and acquaintances alike, we can see how richly endowed he was with the greatest and divinest of all human gifts—the capacity to lift others to a higher level of thought and life. Truly he 'rests from his labours, and his works do follow him.'

I have, &c.,

J. A. SINCLAIR,
Principal.

NORTHWEST TERRITORIES,
HIGH RIVER INDUSTRIAL SCHOOL,
DUNBOW, ALBERTA, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I beg to submit my annual report for the fiscal year ended June 30, 1901.

Location.—This school is situated in the valley of Dunbow, on High river, two miles from Davisburg post office, and about twenty-five miles southeast of the city of Calgary, Alberta. The school buildings are not on an Indian reservation, but on government land, specially reserved for the use of the institution.

Land.—There are nine hundred and sixty acres of land in connection with this school. Four hundred and eighty acres are in the immediate vicinity of the school, consisting of fractions of sections 22, 26 and 27, township 21, range 28, west of the 4th meridian, of which two hundred acres are under crop, either in the valley or on the surrounding heights. The remaining four hundred and eighty acres are a hay reserve, twelve miles southeast, comprising the east half of section 26 and the northeast quarter of section 36, township 20, range 27, west of the 4th meridian.

Buildings.—The institution consists principally of two main separate buildings, one chiefly for the use of the boys and the other for the girls. In the boys' building are the principal's room, reception-room, office, small store-room, two class-rooms, the dormitories, the boys' infirmary and rooms for some of the staff. In the girls' building, which is under the immediate charge of the Rev. Sisters, are the kitchen, dining-room, chapel, the girls' class-room and dormitory, sewing-room and generally the whole of the matron's department. The workshops are to the west of the boys' school. and completely separated from it. Behind the main buildings are the stables, granary, piggery, implement and carriage-shed and slaughter-house. The hospital and engine-house are two seperate buildings to the east of the girls' house, on the banks of High river. No new buildings have been erected during the year.

Accommodation.—There is accommodation for one hundred and fifty pupils, and a staff of twelve members.

Attendance.—The attendance for the year averaged seventy-five, which was forty-five short of the authorized number. Twelve pupils were admitted and sixteen were discharged.

Class-room Work.—In the class-rooms the official programme of studies is carefully adhered to. Examinations both oral and written are held at the end of each term, and prizes are distributed in the different class-rooms. Fair progress is observed. English is the only language spoken in the school, so much so that many of the younger pupils have almost completely forgotten their native tongue.

Farm and Garden.—Last year's harvest included eleven hundred bushels of oats, two hundred and forty-six bushels of barley, one hundred and seventeen bushels of wheat, seven hundred bushels of potatoes and about two thousand bushels of turnips. Besides supplying the requirements of the kitchen, we sold two hundred and ninety-three bushels of potatoes, realizing on an average seventy-five cents a bushel.

Four hundred and sixty tons of hay were put up. As we had more than we needed, we sold one hundred and fourteen tons of this hay at $3 a ton in the stack. I may state here that the farm is the mainstay of the institution, as it cheapens living exceedingly, and has been a very considerable source of cash revenue.

From the garden we received twelve hundred heads of cabbage, fifty bushels of carrots, twenty-five bushels of beets and about twenty bushels of onions, besides other vegetables.

There are two hundred acres in crop this year, and, if the season continues favourable, we are assured of a good return.

Stock.—The school herd numbers one hundred and seventy-two head of cattle. One hundred and seventeen of these belong to the institution. Fifty-five head are the property of the boys, who purchased them with their earnings, when hired out among the neighbouring farmers. All the beef required by the institution is supplied by our herd, and besides we sold beef steers to the value of $460. The raising of pigs has also been a profitable industry. A considerable amount of pork as well as beef was furnished to the kitchen and in addition we sold $239 worth of hogs. We have still on hand five breeding sows, and a sufficient supply of pork and bacon for the summer's use.

Our horses consist of three work teams, a driving team, and fifteen colts and fillies. We sold a saddle horse for $70.

As regards the farm and the care of the stock, all the work has been done by the boys, under the instructor. Although many boys during the past year have not been trained as mechanics, we have the satisfaction of knowing that a large number of them have had good experience in practical and successful farming.

Industries Taught.—Stock-raising and farming are the principal industries taught here.

Carpentry.—For a part of the year there was no carpenter, and the senior boy among the carpenter apprentices, acting as foreman, did all the repairing and any carpentry work required. As we have now a regular carpenter instructor, there will be from eight to ten boys employed in the shop.

Shoemaking.—No regular tradesman is employed in this department. An ex-pupil is hired for four or five months to do repairing. He is assisted, from time to time, by some of the bigger boys.

Baking.—Two apprentices work at this trade. They also help the baker to slaughter cattle and cut up the meat.

Needlework.—The girls are thoroughly grounded in housewifely duties. Sewing, knitting, mending and general repairing are part of their daily routine.

Moral and Religious Training.—The pupils are instructed in the fundamental principles of Christianity, and are led to apply them in their daily duties. In general, the conduct of the children has been very satisfactory.

Health and Sanitary Condition.—I regret to say that a boy, who had been ill of phthisis, died in October. The children's health, as a rule, has been excellent.

The sanitary condition of the school is good.

Water Supply.—A large well, close to the river, affords us an abundant supply of good water, which is pumped into the tanks in the different buildings by means of a steam-engine.

Fire Protection.—Three tanks with a capacity of fourteen hundred gallons each are kept full of water, which can be used on any flat. On each story there are one hundred feet of hose connected with pipes from the tanks. Fire-extinguishers and hand-grenades are placed in the different rooms, and fire-pails constantly full of water are distributed in convenient places. We have on hand eight axes, eighteen fire-extinguishers, fifty-eight hand-grenades, and forty-two fire-pails. In connection with each dormitory is a large fire-escape.

Heating and Lighting.—The boys' building is heated by four hot-air furnaces. Ordinary stoves are used in the girls' building. The system of lighting is entirely by coal oil lamps.

Recreation.—All sorts of outside games among the pupils are heartily encouraged. The boys play football, cricket, and baseball in summer. In winter hockey is their principal game. The proximity of the river affords an unfailing field for this latter game. The girls amuse themselves during play-time at croquet, basket-ball, and other healthy exercises. The several divisions have a half-holiday on different days of the week, when they roam at large gathering flowers, fruit and otherwise enjoying themselves.

I have, &c.,

M. LEPINE,

Acting Principal.

NORTHWEST TERRITORIES,
BATTLEFORD INSPECTORATE,
PRINCE ALBERT, September 21, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my fourth annual report on the inspection of Indian schools.

EMMANUEL COLLEGE, PRINCE ALBERT.

This school was inspected on February 13 and 14. The staff was made up as follows :—Rev. James Taylor, principal ; Mrs. Taylor, matron ; Miss McIntosh, assistant matron ; Mr. Harris, head teacher ; Miss Ridgeway, assistant teacher ; Mrs. Binns, cook.

There were fifty-one pupils enrolled, of whom forty-one were present in classes at inspection, five were at home on leave, and five were absent from classes for other causes.

The classes were examined in all the regular subjects of study and with moderately satisfactory results. The senior division has suffered much disadvantage from the want of a permanent and properly qualified teacher. Progress accordingly was slight, but the actual condition of the work was more promising. The classes were again in charge of competent teachers, a fair state of discipline was restored, and the work was systematically conducted.

The school material had suffered from neglect and careless handling, but in this matter also an improvement was being effected.

The outdoor industries taught in connection with this institution are farming, gardening, haying and the care of stock, besides some little attention to carpentry. The agricultural industries have been conducted with marked success, and with very great benefit to the pupils, as the work has all been done by them under the direction of the principal. Altogether there are fifty-five acres under cultivation. The grain crops were good and the return of roots and vegetables was much more than sufficient for the needs of the school.

The following implements were purchased during the past year : one mower, one horse-rake, one set disc-harrows, one set heavy double harness, one set light double harness, one force-pump.

The main improvements, internal or external, that have been effected in the buildings are as follows : storm sash has been provided almost throughout, and commodious

porches have been erected over all entrances, which together with unusually thorough banking has rendered the buildings comfortable in the severest weather. The kitchen, sewing-room, and both lavatories have been remodelled and enlarged, securing much greater convenience and comfort. A waiting-room has been opened for the boys, provided with newspapers and books. Improvements more extensive and much needed are contemplated by the principal according as the means at his disposal will permit.

The dormitories were clean and well ventilated and the internal economy throughout was all that could be desired.

Duck Lake Boarding School.

This school was inspected on February 18 to 21. The principal is fortunate in having a tolerable degree of permanency in his staff, which is at present made up as follows : Rev. M. J. P. Paquette, principal ; A. McKenna, B.A., teacher, boys' division ; Alfred Boyer, carpenter ; George Boyer, farmer ; J. Guillemot, assistant farmer ; J. Dupont, stockman ; D. McKenzie, baker ; Joseph Lacroix, disciplinarian ; Rev. Sister Kent, matron ; Rev. Sister Elizabeth, teacher, girls' division ; Rev. Sister Agnes, cook ; Rev. Sister Mary Frances, assistant cook ; Rev. Sister Mary Barghmans, laundress ; Rev. Sister Madeleine, seamstress.

The number of pupils enrolled was ninety-six, classified thus :—

	Boys.	Girls.	Total.
Standard I.	25	27	52
" II.	10	10	20
" III.	7	9	16
" IV.	8	..	8
Total.	50	46	96

The reserves from which the attendance is drawn are as follows :—

Beardy's and Okemassis'.	22
Petequakey's	20
One Arrow's.	19
Poundmaker's.	5
Ahtahkakoop's.	3
Peter Ballendine's.	3
Mistawasis'.	2
Sweet Grass'.	2
The Pas.	2
Little Pine's.	1
Meadow Lake.	1
Yellow Quill's.	1
Non-treaty.	15

For class-work the pupils are now arranged in two divisions, according to sex. In the boys' class-room the tone of the work is exceedingly good ; well devised methods of instrction are employed and the progress is very satisfactory. In arithmetic the pupils work problems of moderate difficulty and set forth the reasoning in statements with much clearness. The girls are backward in their studies, with the exception of reading and spelling, considering their age and the time they have spent in school. They are, however, well trained in all departments of housework, and are sensible and mannerly in their deportment, which is of high importance in reference to their future.

The class-rooms are now commodious and well equipped, and the facilities for school work are almost perfect.

An addition, 100 x 40 feet and two stories high, has been made to the main building, furnishing on the ground floor the two class-rooms just referred to, besides a girls' recreation-room, and on the second floor a large dormitory which is occupied by the girls and which affords upwards of six hundred cubic feet of air space for each occupant.

Among recent additions to the equipment are a complete outfit of patent folding desks and of iron bedsteads. An acetylene gas generator has also been installed, of about fifteen hundred candle power. There are in all two hundred and fifty jets, connected by over a mile of iron tubing. With these are lighted the class-rooms, dormitories, dining-room, office, parlour, and private apartments of the main building; also the chapel, the employees' dwellings, the bakery, the laundry, the stables and other outbuildings, and the flower garden.

Battleford Industrial School.

This institution was visited briefly on several occasions between March 1 and June 30.

The staff during this period was constituted as follows :—Rev. E. R. Matheson, principal ; M. B. Edwards, assistant principal ; Thos. McKim, head teacher ; J. H. Scott, farmer ; E. Brown, carpenter ; A Suffern, night-watchman ; Mrs. M. A. Ward, matron ; Miss Helen Chisholm, primary teacher ; Miss E. Shepphird, nurse ; Miss N. Hayes, seamstress ; Miss B. Plumb, dairy-maid ; Miss I. B. Brokowvski, cook ; Miss E. Schofield, laundress ; Mrs. Scott, baker.

The attendance consists of fifty-three boys and fifty-two girls, or a total of one hundred and five pupils.

The class work has been attended with fair success throughout the year notwithstanding the absence of a duly qualified teacher for the junior form. It is at times impossible to secure fully trained teachers at remote points for a moderate remuneration.

All the girls, except the youngest, receive training in the domestic industries suited to their age. The thoroughness of this training continues as heretofore.

Of the boys, twenty-three are farm boys, six are carpenters, and four are bakers, while the younger boys have certain lighter duties. Blacksmithing, shoemaking, and printing, which were formerly taught, have been almost entirely abandoned in favour of the more generally useful industries.

The cultivation of roots and vegetables has been greatly improved in respect both to area and to method. The gardens are now a model for either white men or Indians. Farming, which was always limited, has been reduced almost to nil by the flooding from the Battle river of the best part of the farming land. Arrangements are now being made for a larger area of fertile land with a view to the extension of this industry.

The premises have been further improved and beautified by the gravelling of walks and the planting of trees. This was much needed, as the site of the school is itself bare and unattractive, though commanding a fine prospect.

The main building has been re-shingled throughout and ten new dormer windows inserted which admit additional light and ventilation to the dormitories on the third floor.

The fire-protection is extensive, consisting of escapes, ladders, axes, buckets, grenades, extinguishers, and a complete set of the McRobie stationary fire-apparatus.

Thunderchild's Boarding School.

This school is located adjacent to Thunderchild's reserve in the Battleford agency. It was opened on April 1 with an attendance of ten, which has since been increased to eleven, the authorized limit.

During the summer a compact and substantial building has been erected at a cost of $2,500. This building is capable of accommodating between fifteen and twenty pupils in addition to the staff.

The site of the school is well chosen. It is central to the reserves from which the attendance is drawn. The soil of the locality is fertile, and there is an abundant supply of good water.

The school is under the auspices of the Roman Catholic Church, and the Rev. H. Delmas, O.M.I., is principal.

Ahtahkakoop's Day School.

This school was visited on December 14 and 18.

Louis Ahenakew, a member of the band, and an ex-pupil of Emmanuel college, is teacher.

The attendance at inspection consisted of four boys and six girls, total, ten. The number enrolled was fifteen.

The pupils present were classified thus :—

	Pupils.
Standard I.	6
" III.	2
" IV.	1
" V.	1

The methods of instruction are good and the progress of the pupils is satisfactory. A comfortable new log frame building was almost completed.

Mistawasis' Day School.

This school was inspected on December 20, and visited also on other occasions.

There were fifteen pupils enrolled, of whom fourteen were present, namely, ten boys and four girls. These were classified as follows :—

	Pupils.
Standard I.	10
" II.	2
" III.	2

The teacher, Miss Gillespie, has had training for public school work, is very much devoted to her dutes, and is accomplishing a valuable work.

Wahspaton (Sioux) Day School.

This school is situated on the Sioux reserve, about nine miles northwest of Prince Albert.

Miss L. M. Baker is the teacher.

The number of pupils enrolled is eleven, of whom seven were present, namely, four boys and three girls. Two of these are in standard I, three in standard II, and two in standard III.

Battleford Agency.

The day schools of the Battleford agency were visited on several occasions since March 1.

Red Pheasant's Day School.

In Red Pheasant's school a fair attendance is maintained and good results attend the teacher's efforts ; but with this exception little is at present being accomplished in the day schools of this agency.

Montreal Lake Day School.

This school was inspected on August 14. Teacher, John R. Settee, an ex-pupil of Emmanuel college. Present at inspection, thirty-six, namely, twenty boys and sixteen girls. All are in standard I. Such an attendance occurs only at treaty time and continues only for about a fortnight.

Little Hills (Lac la Ronge) Day Scrool.

This school was inspected on August 31. Teacher, Samuel Abraham. Pupils present, sixteen, namely, six boys and ten girls. Average attendance for twelve months, seven.

General Remarks.

The remainder of the boarding and day schools of this inspectorate were not visited during the past year.

I have, &c.

W. J. CHISHOLM,
Inspector of Indian Agencies.

Northwest Territories,
Qu'Appelle Inspectorate,
Fort Qu'Appelle, September 20, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit the following report of my inspection of industrial, boarding and day schools, in Manitoba and the Northwest Territories from August, 1900, to September, 1901.

Round Lake Boarding School.

This school was inspected on August 31, 1900. The staff consists of Rev. Hugh Mackay, principal ; Mrs. Mackay, matron ; Mr. Sahlmack, teacher ; also a farmer and two domestic servants.

Number of pupils present, thirty : boys, seventeen, girls, thirteen ; number on roll, thirty, graded as follows :—

	Pupils.
Standard I.	10
" II.	7
" III.	9
" IV.	4

School material is sufficient, the class-room was well equipped, and was clean and comfortable.

The house proper was in its usual good condition, dormitories clean and well ventilated, meals well cooked and served. The farm supplies all the beef, pork, milk, butter, vegetables, &c. There is a herd of cattle of about one hundred head, besides horses, pigs and poultry, all the property of the school.

The financial statement showed all accounts paid. The boys and girls were receiving the best of training in this school. It is under the auspices of the Presbyterian Church.

Cowesess Boarding School,

in the Qu'Appelle valley, was inspected on September 3, 1900. The number of pupils present, twenty-three : boys, thirteen, girls, ten. Three white pupils were in the number. The pupils were classified as follows :—

	Treaty pupils.
Standard I.	19
" II.	1

The supply of material was ample. The teacher left at the beginning of July, and a new one was daily expected. The Rev. Father Jacobs was in charge. The building, which I have already described, was in perfect order, and the pupils were clean and neatly dressed. The water is pumped up to the tanks by a gasoline engine. There is a good farm attached and two thousand bushels of potatoes were being gathered ; butter is made. The farm stock consists of thirty head of cattle, twelve horses, six pigs, and sixty poultry.

This school is conducted under the auspices of the Roman Catholic Church.

Birtle Boarding School

was inspected September 21 and 22, 1900. Number of pupils present, forty-five : boys, thirteen, girls, twenty-two ; classified as under :—

	Pupils.
Standard I.	19
" II.	9
" III.	14
" IV.	3

School material sufficient ; a few articles were asked for.

Staff.—J. W. Small, principal and teacher ; Miss MacLaren, matron ; and Miss McLeod, assistant matron.

Considerable improvements were made in the building since my last visit, the expenditure being over $4,000, paid by the Foreign Mission Committee of the Presbyterian Church.

The old class-room is now used as a dining-room, and the new wing on the ground floor is used as a kitchen, store-rooms, and pantries. The second flat, 30 x 20 feet, is used as a class-room. It has a ten-foot ceiling, sheeted with dressed lumber, and a wainscotting two feet nine inches all around, and furnished with patent desks, blackboard on walls at one end and both sides of the room. There is dormitory accommodation for fifty pupils besides the staff. The basement contains furnaces, bake-oven, vegetable cellar, girls' wash-room, bath-room, &c.

There is a good garden of five acres, and all vegetables for the use of the house are raised.

There are three horses, five cows, six pigs, and sixty poultry.

This school is held in high esteem by the Indians of the surrounding reserves, as they have full confidence in the school management. The financial statement showed the receipts to be $5,132.40 for the year, on working accounts, and expenditure $5,052.05, leaving a balance July 1 of $80.35. The present value of the buildings, equipment, live stock and clothing is $15,000. The school is under the auspices of the Presbyterian Church. The building is the most imposing in the town of Birtle.

KEY'S DAY SCHOOL, PELLY AGENCY,

was inspected October 11 and 12, 1900. The number of pupils present, seven : boys four, girls, three ; number on roll, twelve, classified as under :—

	Pupils.
Standard I.	6
" II.	2
" III.	4
Total	12

School material sufficient. The Rev. Owen Owens is teacher. The building was comfortable and the pupils were clean and well dressed, and were making good progress in their studies.

As some of the pupils live a long way from the school, a meal is given them at mid-day of soup, meat, tea and biscuits.

Mrs. Owens takes considerable pains in teaching the girls knitting, sewing, &c., and some nice specimens of the girls' work were noticed.

The boys had a small garden, and they were quite proud of their crops. This is a Church of England school.

CROWSTAND BOARDING SCHOOL.

This school is in the Pelly agency and was inspected on October 15 and 16, 1900. The number of pupils present, thirty-five—boys, nineteen ; girls, sixteen—number on roll, thirty-five, and there were six non-treaty pupils, paid for by the Northwest government. The classification of treaty pupils is as follows :—

	Pupils.
Standard I.	13
" II.	8
" III.	8
" IV.	6
Total	35

School material sufficient.

Staff.—Rev. Neil Gilmour, principal, and missionary on the reserve ; Miss Gilmour, matron ; Miss Petch, teacher ; Miss Dunbar, assistant matron ; also a farmer and a domestic servant.

An addition has been made to the building since my last visit, at a cost of $5,000, paid by the Foreign Missionary Committee of the Presbyterian Church. The new wing is 67 x 38½ feet, the old part was 26 x 38½ feet, making the length of the build-

ing 93 x 38½ feet. It is built on a stone foundation, the stone from the old school building having been used for the purpose.

The basement contains the boys' recreation-room, vegetable cellar, and a roomy laundry, cisterns for hard and soft water, furnaces, &c. On the ground floor is the class-room, 25 x 33 feet, ceiling 10 feet high, sheeted with dressed lumber and painted, closets at one end for school material, coat-room, &c. The blackboard is four feet high and extends all around one side and two ends of the room. The room is wainscotted all around and has three large windows affording plenty of light.

The following mottoes adorn the walls, they are neatly done in illuminated letters, 'Our Motto—Progress,' 'Our Aim—Citizenship,' and at the other end the room—'God bless our School.' 'Wisdom is better than Rubies.' The ventilation of the class-room was very good. The kitchen is 21 x 19 feet ; the dining-room 17 x 30 feet ; both are bright cheerful rooms. The dining tables are covered with white oil-cloth. The next flat has two dormitories for boys, one 25 x 19 feet and the other 25 x 17 feet, and two for girls, each 18 x 15 feet, with clothes closets, and in each dormitory there are lockers. There are four bed-rooms in the new part. New iron bedsteads are supplied throughout at a cost of $400, paid for by the ladies of the Foreign Missionary Committee. There are two furnaces, one under each end of the old and new part.

The older portion has the staff dining-room, sitting-room, study and office, four bed-rooms and closets for clothing, &c. Upstairs, there is a good-sized sewing-room.

Fire-escapes are provided for each of the boys' and girls' dormitories.

There is a new stable built at a cost of $400, 26 x 52 feet, also a hennery 26 x 14 feet, and the old stable 16 x 24 feet, affording plenty of room for the live stock, which consists of six cows, seven young cattle and three horses, besides the private team of the principal ; also turkeys, geese, ducks and hens—some one hundred in all—and there are sheep also, out on shares with the Doukhobors.

A new stone milk-house had been put up and an ice-house adjoins. There is a nice flower garden, and four acres of roots, and a grain field of ten acres. The receipts on working account for the year were $6,353.32, and expenditure, $6,240.99, leaving a balance on hand July 1, of $112.33. The improvements were: on the building $5,000 ; on stable, $400 ; on iron beds, $400, and on hennery, $200 ; or a total of $6,000 expended on buildings and equipment during the year. The value of the property is $11,152.63.

The school in every department is in a flourishing condition, and the best of care is taken of the pupils. The training in and out of the school-room is second to none of the schools I visit. The school is under the auspices of the Presbyterian Church.

Keeseekouse Day School.

This school is situated in the Pelly agency, and was inspected on October 19, 1900. The number of pupils present, five : boys, three, girls, two ; number on roll attending, seven, classified as follows :—

	Pupils.
Standard I.	4
" II.	2
" III.	1
Total.	7

School material sufficient. W. A. Tucker, teacher. This school was neat and clean, and there was a small garden worked by the boys. Some knitting was noticed. The interest in this day school seemed to have died out. The teacher had only been at the work a short time and had not got into touch with the parents. A new boarding

school was being erected some three miles distant, and it was expected that when it got started the day school would be closed up. It is to be hoped the new school will throw more life and energy into the work. This school is under the auspices of the Roman Catholic Church.

Regina Industrial School

was inspected from November 22, 1900, to January 2, 1901. Number of pupils present, one hundred : boys, fifty-eight, girls, forty-two. The number enrolled was one hundred and twenty, classified as under :—

	Boys.	Girls.	Total.
Standard I..	16	15	31
" II..	16	11	27
" III..	13	8	21
" IV..	9	12	21
" V..	14	6	20
	68	52	120

The school was well supplied in the way of material and other equipment.

The sudden death of the lamented Principal McLeod, which took place on November 20, 1900, cast a gloom over staff and pupils, and was a great shock to his numerous friends all over the country.

I was requested by the Commissioner to take charge until a successor was appointed, I consequently remained there until January 2, 1901. Mr. Alex. Skene, having been appointed acting principal, I transferred the property over to him on December 29, 1900, and I must bear testimony to the faithful manner in which Mr. Skene performed his duties during my stay, in fact the same can be said of all members of the staff.

The staff up to November was : Rev. A. J. McLeod, principal ; Hugh Stewart, assistant principal ; Alex. Skene, head teacher ; W. M. Grant, farmer ; Herman, a graduate, carpenter ; Mrs. Hugh Stewart, matron ; Mrs. Matheson, cook ; Mrs. Weaver, laundress ; Miss Nicoll, teacher ; Miss Cameron, seamstress, and John Hunter, a graduate, fireman. Owing to the death of Mr. McLeod, and resignations and other changes during December, the re-organized staff on January 1, 1901, was as follows :—

Alex. Skene, acting principal and teacher ; W. M. Grant, farmer ; Herman, carpenter ; Miss Nicoll, matron ; Miss Cameron, seamstress ; Mrs. Matheson, cook ; Mrs. Weaver, laundress ; Miss Skene, teacher junior department, and John Hunter, fireman.

Mr. R. J. McPherson was to assist the acting principal in the office work and conduct the Sunday services for three months.

I took a complete inventory of all property and balanced each account up to December 31, 1900, and the various branches of the work were proceeded with in the usual satisfactory manner.

The school had a very fair crop, seventy-eight acres were in grain and eight acres roots and garden.

There were harvested, four hundred and seventy-two bushels of wheat, four hundred and twenty-four of oats, eight of rye, eight hundred and fifty-five of roots, besides cabbages, celery, brome-grass seed, &c., and a plentiful supply of all kinds of vegetables during the season for the use of the house.

The Sunday services were interesting and orderly, and the choir, composed of Indian boys and girls, was a credit to the school. The singing was better than one hears in many white congregations.

The usual Christmas tree festivities took place : the pupils had an idea that because of the death of Mr. McLeod the tree would be omitted, but old Father Santa Claus appeared as usual, and every boy and girl, big and little, and each member of the staff got a gift of some kind.

The farmer had ready for next year six acres of new land broken, sixty acres summer-fallow and thirty-three fall ploughing. Four hundred and twenty-five maple trees had been planted around the buildings. The principal's house had been veneered with brick since my last visit, and a new well had been dug near the stables which was a boon for the cattle. Fifty acres of the farm are in brome grass, and this furnishes a good supply of hay. The live stock consisted of horses, cattle, pigs and poultry.

The financial statement showed a handsome balance on hand to begin the new year with, but the big bills for fuel would lessen this somewhat before the winter was over, if not entirely wiped out.

This school is under the auspices of the Presbyterian Church.

A considerable amount of clothing is sent annually by the Women's Foreign Missionary society of that church, for the use of the school ; this could be dispensed with, if the fuel bills could be reduced.

Day Star's Day School.

This school is in the Touchwood agency, and was inspected on January 29, 1901. The number of pupils present, fourteen : boys, seven, girls, seven ; number on roll, fourteen. Classification :—

	Pupils.
Standard I.	8
" II.	3
" III.	3
Total	14

All material necessary was on hand. Mrs. Smyth, teacher. The school-room had been newly kalsomined, and the place was tidy and comfortable. A feature of this little school is that the pupils are never absent. There is a small garden attached. Mrs. Smyth was doing her best to instil knowledge into these interesting boys and girls, some of them smart and apt learners.

Mr. Martineau, the agent, and Mr. Stanley, the farmer, take an active interest in this school in having all children of school age on the reserve attend. It is a Church of England school.

Gordon's Boarding School

situated in the Touchwood agency, was inspected on February 5 and 6, 1901. Number of pupils present, thirty-one : boys, fourteen, girls, seventeen ; number on roll, thirty-one. Classification :—

	Pupils.
Standard I.	9
" II.	11
" III.	4
" IV.	7
Total	31

School material sufficient.

Staff.—Mark Williams, principal and teacher ; Mrs. Williams, matron ; also a man servant. The washing and scrubbing are done by Indian women.

A new stable had been added during the year, a ceiling put in on basement, the dairy cellar floored, a new roof on ice-house, and the whole house kalsomined.

The entire house was in perfect order, beds and bedding clean. The health of the pupils was good, and not a death took place during the year.

Mr. Williams is a successful gardener as well as a good manager. The garden supplied five hundred bushels of potatoes, six hundred bushels of carrots, six hundred bushels of turnips, fifteen bushels of onions, ten bushels of parsnips, six hundred bushels of mangolds, besides cabbages, beets, celery, lettuce, radishes, &c. A liberal use of all kinds of vegetables during the season was allowed, the good health of the pupils being due no doubt to this kind of living. The best of bread was used, made from Strong Baker's flour. The pupils were making good progress in the class-room, and many were expert in arithmetic, writing and reading and other exercises, showing that their training was in no way neglected. New desks were badly needed.

The financial statement showed :

Receipts to June 30, 1900	$ 3,130.98
Expenditure to June 30, 1900	3,130.98

The live stock consists of two horses, three cows, one heifer, four steers, six calves, and eighty poultry.

The flower garden in front of the main building is always the admiration of passers-by.

Mr. Williams carried off a number of prizes at the Fort Qu'Appelle exhibition during the past summer. I was well pleased with the steady work that is done in this school, and of the cleanliness and tidiness of the whole house and surroundings. The school is under the auspices of the Church of England.

Muscowequan's Boarding School

in the Touchwood agency, was inspected on February 8, 1901. Number of pupils present, thirty : boys, seventeen, girls, thirteen ; number on roll, thirty. There are five pupils non-treaty in attendance also, making a total of thirty-five. The classification was as follows :

	Pupils.
Standard I.	14
" II.	6
" III.	9
" IV.	1
Total	30

Nothing was asked for in the way of material, the supply on hand being ample. The staff consisted of : Rev. Father Jacobs, in place of Rev. Father Perreault, who was absent at the time ; Sister Superior Prince, matron ; Sister Valade, teacher ; Sister Agnes, in charge of girls ; Sister Alexander, cook ; Rev. Brother, carpenter, and A. Ligault, stableman.

The whole house was in its usual good order, everything being as clean as a new pin.

The class-room was ably conducted by Sister Valade, and the pupils were well up in reading, writing, arithmetic, geography, dictation, &c. I sent specimens of composition and of drawing to the Commissioner.

A neat picket fence had been placed around the grounds, also a fence placed on both sides of the avenue leading to the main trail. Trees will be planted at each side of the avenue. There is a carpenter's shop, and a good supply of tools was on hand.

All repairs are made by the carpenter, so that nothing is allowed to be out of order. A large pasture field had been fenced. There is an open skating rink, and it is made good use of by the pupils ; there is a large swing also. The garden is a good one. The crop harvested was three hundred and seventy bushels potatoes, thirty of turnips, fifteen of onions, twenty of carrots, five of beets, two hundred heads of cabbages, and there was also a supply of lettuce, celery and radishes. During the season, eighty loads of hay were stacked at the stables. The live stock consists of five horses, seven cows, two steers, six heifers, ten calves, and thirty-five poultry.

The health of the pupils was good. There was one sick boy at the time of my visit, but his parents came and took the boy home. The pupils were warmly and neatly dressed, and are polite and well-behaved. It is always a pleasure to visit this school, as there is an air of order and system, which go to make a place of this kind pleasing to visitors. I had much pleasure in reporting favourably of this school.

The expenditure during the year was $3,210.60 ; receipts, $2,545.50 ; deficit, $665.10.

Qu'Appelle Industrial School

This school was inspected on March 5, 6, 7, and 8, 1901. Number of pupils present, two hundred and twenty-four : boys, one hundred and two, girls, one hundred and twenty-two. Number on roll, two hundred and twenty-eight, classified as under :—

	Boys.	Girls.	Total.
Standard I.	23	39	62
" II.	20	19	39
" III.	37	41	78
" IV.	10	18	28
" V.	12	9	21
Total.	102	126	228

The four school-rooms, senior and junior boys, and senior and junior girls, were well supplied with school material, and well equipped in every way for the work. Patent desks are used. The rooms are comfortable, being well ventilated.

The staff consisted of : Rev. Father Hugonard, principal ; Rev. Father Ruelle, assistant principal ; E. D. Sworder, clerk and storekeeper ; J. B. Foday, teacher, boys' senior department ; J. McNabb, teacher, boys' junior department ; T. Paquin, acting farm instructor ; Wm. Crossley, carpenter ; D. McDonald, blacksmith ; M. Filiatrault, baker ; C. Miles, fireman and painter ; G. Shick, shoemaker ; V. Pealapra, tinsmith ; Rev. Sister Goulet, matron ; Rev. Sister Brebant, cook ; Rev. Sister St. Amand, girls' matron ; Rev. Sister LeMothe, boys' matron ; Rev. Sister St. Alfred, teacher, girls' senior room ; Rev. Sister Marianni, teacher, girls' junior room ; Rev. Sister Bergeron, tailoress, and Rev. Sister St. Vital, laundress.

The class work was conducted in each room with ability and I considered capital work was being done, so that this school is not only the largest Indian one in Manitoba or in the Territories, but it ranks also as one of the best managed in every respect.

The pupils come from the following places :—

	Boys.	Girls.	Total.
Assiniboine	4	4	8
Brokenhead	1	..	1
Birtle, Gambler	1	1	2
Crooked Lake	21	21	42
Carleton	3	2	5
Duck Lake	2	5	7
File Hills	13	29	42
Muscowpetung	38	50	88
Moose Mountain	5	6	11
Pelly	3	3	6
St. Peter's	2	..	2
Touchwood	6	4	10
Non-treaty	3	1	4
	102	126	228

The house throughout was examined and everything was found in excellent order, reflecting credit on Sister Superior Goulet and her assistants. The boys and girls were all well dressed and clean, and I did not notice any torn or ragged clothing. To keep such a large number of boys and girls with such neatness is a task that those with a family of three or four can understand.

The meals are well cooked, and served on the minute—all goes on like clock-work.

An entertainment took place in the gymnasium, conducted by the girls only. All the elite of Fort Qu'Appelle attended, and the young ladies were highly commended for their very clever performance.

The farm was not much of a success ; ninety-seven acres of oats and barley were put in, and twenty-two and one-half acres of roots and garden.

The oats were cut green for feed, and barley was a failure. Six hundred bushels of potatoes, two hundred of turnips and one hundred of garden stuff were harvested, besides what was used during the season in the house.

The live stock consisted of fourteen horses, fifteen cows, one bull, two heifers, five calves, twenty-four pigs and seventy-five poultry.

The buildings, shops, stables and sheds were the same as at last inspection, and no new work was going on in the building line, although the principal was having a trench dug in the side of a hill some miles distant, excepting to get a flow of water to supply the school, the well water not being very good.

The books were audited and statements sent to the Commissioner. Mr. Sworder keeps the stock and books in good order.

File Hills Boarding School.

This school was inspected on April 11, 1901. The number of pupils present, fifteen : boys, eight, girls, seven. Number on roll, fifteen, classified as under :—

	Pupils.
Standard I	8
" II	1
" III	4
" IV	2
Total	15

The staff is as follows : Rev. Mr. Farrar, principal ; Mrs. Farrar, senior matron ; and a domestic servant.

The class work was being ably conducted by Mr. Farrar, and the pupils were getting on very well. The house proper was never in such fine order and pupils were clean and neatly dressed.

There was a good supply of vegetables produced from an excellent garden, and a constant supply of milk was obtained by changing the cows when they became dry. The boys help in the garden, take care of the cows and poultry, cut wood, &c. Some very good knitting done by the girls was noticed. This school was never in better condition.

The expenses for the year were $1,440.01, and receipts were $1,347.06, showing a deficit of $92.95, but the earnings for March quarter, 1901, amounting to $273 would pay the deficit, also supplies purchased during March, 1901, leaving no deficit.

This school is conducted under the auspices of the Presbyterian Church.

Birtle Boarding School

was inspected a second time on May 13 and 14, 1901. Number of pupils present, forty-five : boys, fourteen, girls, thirty-one. Number on roll, forty-five, classified as under :—

	Pupils.
Standard I.	22
" II.	6
" III.	13
" IV.	4
Total.	45

The school material was sufficient. There was no change in the staff, which is as follows : W. J. Small, principal and teacher ; Miss McLaren, matron, and Miss McLeod, assistant matron.

A fire took place in March last, causing damage to the building, to the amount of $108. The damage had been repaired and the house was in its usual excellent condition.

In connection with the fire, it is worth mentioning that the fire-buckets are the same as are kept at all our schools. These were the means of saving the building, and it is a warning to all to see that these buckets are kept constantly filled with water, for immediate use, for emergencies only, and any one meddling with them, either pupils or staff, should be instantly dismissed.

The financial statement from July 1, 1900, to April 30, 1901, showed the receipts to be $4,097.05, and the expenditure, $4,063.12, leaving a balance of $33.93 at the credit of the school.

Five acres of crop had been put in. The live stock consisted of two horses, five cows, five pigs and twenty-two poultry.

The pupils had a picnic on Victoria day, about ten miles north of the town. A number of the parents came from the reserves to meet the pupils, and a pleasant day was spent, all returning in the evening without any mishap.

Okanase Day School.

This school is situated in the Birtle agency. It was inspected on May 30 and 31, 1901. The number of pupils present, ten : boys, seven, girls, three. Number of pupils on roll, thirteen, classified as follows :—

	Pupils.
Standard I.	9
" II.	2
" III.	2
Total.	13

Material on hand, ample.

R. C. McPherson is teacher and missionary.

The school-room was clean and comfortable. The inside walls were to be lined with dressed lumber, which would make the room warm in winter.

There was a neat little garden, and a wire fence had been placed around the garden and school. A well had been dug to a depth of eighty feet, without getting water, meantime water is obtained from the river about 300 yards distant.

The little girls do knitting under instruction from Mrs. McPherson, and the little things were quite proud in showing their handiwork in mitts, cuffs, socks, &c. This school is under the auspices of the Presbyterian Church.

Oak River Day School.

This school was reached on June 10, 1901, but as no pupils came, and the teacher had given up hopes of getting an attendance, the school was ordered to be closed on June 30.

There is room here for a flourishing school, as there is a nice building, well equipped, and there are children enough of school age on the reserve to fill a school. The books and other property were placed in the hands of Mr. Yeomans, the farmer, for safe-keeping. The school was conducted under the auspices of the Church of England.

Brandon Industrial School

was inspected on September 3 and 4 and other days in 1901. Number of pupils present one hundred and three : boys, fifty-one, girls, fifty-two. Classification :—

	Boys.	Girls.	Total.
Standard I.	10	16	26
" II.	15	14	29
" III.	22	20	42
" IV.	4	2	6
Total	51	52	103

The school was well provided with material, a few books only having been asked for.

The staff consisted of the Rev. T. Ferrier, principal ; J. G. Hodgson, assistant principal ; Miss Sutherland, matron ; Miss Marshall, assistant matron ; Miss Young, teacher, senior division ; Miss Middlemas, teacher, junior division ; Miss Black, seamstress ; Miss Arnett, laundress ; Miss Shields, cook ; H. Goodland, gardener ; T. B. Barner, carpenter and tinsmith, and J. G. Milne, farmer.

Additions made to the main building during the year gave an extra class-room 28 x 30 feet, a sewing-room 21 x 21 feet, two drying-rooms, each 10 x 20 feet, a store-

room 7½ x 20 feet, and another for dry-goods adjoining the sewing-room 10 x 20 feet, also a good-sized dining-room for the staff on the second flat.

The whole work is substantially done, and affords excellent conveniences for the proper carrying on of the work.

The heating and ventilating arrangements are perfect. A new range had been provided for the kitchen. The whole house was in splendid condition, reflecting credit on Miss Sutherland and her assistants.

Meals are well cooked and served, and always on time.

The kitchen cellar was a feature, being filled with jam, pickled tomatoes and cucumbers, rhubarb, fruits, &c., laid away for winter use.

The crops on the farm and gardens were immense, and these compared favourably with the experimental farm and gardens alongside. In a letter received from the principal he informs me that threshing had been completed, giving an average of thirty-one bushels of wheat to the acre, fifty of barley and seventy of oats.

The root crop of potatoes, turnips, mangolds, carrots and onions was very large ; the trouble being where to store them all.

The barn was fillled from top to bottom with the finest hay.

The carpenter-shop is an important branch, and several boys get good training in it, many repairs are made and Mr. Barner being a tinsmith as well, many articles of tinware are made for the use of the house, such as dustpans, kettles, boilers, bake-pans, &c.

The electric light has been introduced in the building and is a great improvement.

Bread continued to be purchased, costing a shade less than two cents a pound, delivered. The bread was of choice quality. Beef cost 7 cents a pound, hard coal, $9.50 a ton, and soft coal, $4 a ton.

The class-rooms are presided over by Miss Young and Miss Middlemas, both experienced and accomplished teachers, and splendid work was being done in both rooms.

An improvement was noticed in the better speaking of the older girls, although some of them are still very backward in this respect, but clever enough in other ways. The speaking of Cree had almost ceased, and I heard none of it during my visit.

The pupils come from the following places :—

	Boys.	Girls.	Total.
Norway House	10	15	25
Oxford House	6	5	11
God's Lake	5	4	9
Fisher River	10	11	21
Poplar River	1	2	3
Berens River	3	2	5
St. Peter's	2	1	3
Oak River (Sioux)	10	5	15
Cross Lake	4	2	6
Whitecap		1	1
Bull's Head		4	4
Total	51	52	103

The financial statement to June 30, 1901, showed receipts for the year to be $12,-250.44, and expenditure, $12,249.88, leaving a balance of 56 cents. All accounts were paid.

The school work in all departments is in a flourishing condition. The principal has a loyal staff, and each member is interested in the work, and the Rev. Mr. Ferrier

is more than bearing out the high estimation formed of him when he took charge two years ago.

The cost of additions and improvements outside of regular expenditure amounted to $4,948. My inspection was a pleasant and satisfactory one. The school is under the auspices of the Methodist Church of Canada.

I have, &c.,

ALEX. McGIBBON,
Inspector of Indian Agencies and Reserves.

NORTHWEST TERRITORIES,
CALGARY INSPECTORATE,
CALGARY, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to report upon my inspection of Indian schools during the past fiscal year. Since my last annual report I have visited and inspected the following schools :—

Edmonton Agency.—Joseph's reserve (Roman Catholic) day school ; St. Albert (Roman Catholic) boarding school.

Hobbema Agency.—Louis Bull (Methodist) day school ; Sampson (Methodist) day school.

Morley Agency.—McDougall Orphanage (Methodist) boarding school.

Blood Agency.—Bull's Horn (Church of England) day school ; St. Paul (Kissock Homes, Church of England) boarding schools ; Immaculate Conception (Roman Catholic) boarding school ; Blood hospital.

Peigan Agency.—Sacred Heart (Roman Catholic) boarding school ; Victoria Home (Church of England) boarding school ; St. Joseph's (High river) industrial school.

McDOUGALL ORPHANAGE.

I visited and inspected the McDougall Orphnage (Methodist) boarding school on October 8. I was accompanied by Mr. Sibbald.

Staff.—J. W. Niddrie, principal ; Miss Walsh, teacher ; Miss Buckler, matron ; Miss Shaw, kitchen ; Miss Wellwood, sewing-room ; J. Nichol, farmer ; Joseph Apow (Indian), blacksmith.

Class-room.—The class-room is a detached building, large size, well heated by a furnace and box stove ; the desks are home-made ; it is well supplied with blackboards, books and lesson cards ; the small children have blocks and toys for object-lessons.

I attended both morning and afternoon sessions ; in all there were thirty-eight children present, two being on the sick-list—total, forty. They are graded as follows by the teacher :—

	Pupils.
Standard I.	17
" II.	9
" III.	6
" IV.	6
Total.	38

Miss Walsh is a clever and conscientious teacher, but with thirty-eight junior pupils she has more on her hands than one teacher can well accomplish.

The older pupils passed through a creditable examination in what may be termed divinity ; they read fluently from the Gospels, recited the creed, Lord's prayer and Ten Commandments.

Some mental arithmetic and work on slates was done creditably, also some composition.

They sang several hymns and were put through calisthenic exercises.

The children were well dressed, having on also good boots and stockings. They were clean in their persons, and looked both healthy and well nourished.

Dietary.—I attended at the pupils' dinner, the food was good, in sufficient quantities, and well cooked and served.

Dormitories.—These were in good order, with single iron cots, clean and sufficient bed clothing, and all neatly made up ; the rooms were well ventilated.

The kitchen, pantries and laundry were each visited and found in good order.

Farming.—In this stony, hilly country, and so near the mountains, the farming is limited to growing potatoes, roots and fodder for the stock, of all these they had a fair supply.

Live Stock.—This consisted of the following : cows, thirty-one ; heifers, fifteen ; spring calves, twenty-four ; steers, two ; bulls, one ; total, seventy-three ; work horses, three ; brood mare and colt, two ; saddle horses, three ; total, eight ; pigs, three.

Blacksmith Shop.—The blacksmith shop is in charge of Joseph Apow, who is an ex-pupil of Red Deer industrial school. He appears to be an expert workman in both wheelwright work and general blacksmithing.

Bull's Horn Day School.

Lucius Hardyman, teacher. I was at this school on December 4, 1900, morning and afternoon, and on the 5th I called to inspect it.

As is happened, I arrived sharp at 9 a.m., but as a boy had died in the camp during the night, it was in mourning and the pupils were tardy in arriving.

The school premises consist of a neat cottage residence and a large school-house attached. The school-room was clean and neatly arranged and furnished. The dummy windows that I complained about last year have been restored with sash and glass, and storm-sashes have been put on all the windows. The yards are neatly fenced, and the stables, outbuildings, wood-pile, &c., are a model for the Indians to copy.

I examined this school. The register contained the names of twelve girls and nine boys, ranging in ages from five to thirteen years, and the attendance was eleven.

The teacher is painstaking, and the children are progressing a little in learning, good manners and civilized habits. They were decently clothed. They receive a hot dinner every day at the school, which is cooked by Mrs. Hardyman, who takes great interest in the pupils and devotes much time to their temporal requirements.

St. Paul (Kissock Home) C. E. Boarding School.

In company with the agent I spent the whole of December 17 at the St. Paul boarding school.

This school is a mission of the Church Missionary Society (C. M. S. England), in the diocese of Calgary.

Staff.—The staff of the school is as follows :—Rev. A. de B. Owen, principal ; Mrs. Owen and Miss Wells, teachers ; Miss Denmark, girls' matron ; Miss Janfield, boys' matron ; Mrs. Irvine, cook, and J. Yeomans, farming instructor.

Buildings.—The following buildings comprise the mission :—(*a*) principal's residence and boys' home ; (*b*) girls' home and residence of matron and cook ; (*c*) school-house, with chancel attached and shut off therefrom by folding doors ; (*d*) hospital ; (*e*) residence, married employee ; (*f*) laundry ; (*g*) storehouse ; (*h*) and good stables. There are also cow-byres, poultry-houses, cattle-corrals, two root-houses, coal-houses, &c.

There is a recently-erected windmill and water-tank in the centre of the large garden ; it is intended to use this for irrigating the garden.

In addition to the garden (say four acres), there is fenced for pasturage, about one hundred and fifty acres.

The buildings appear to be in a fair state of repair ; the residences and hospital were lathed and plastered inside during the past year, which has added greatly to their comfort. The hospital building was unoccupied, not having been furnished.

The root-houses contained the product of the garden ; the yield was not very great on account of drought early in the summer.

The stables were well kept and there appeared to be a good supply of hay for the live stock, which consisted of two team horses, two cayuses, five milch cows and five young stock.

I visited every department, the kitchen, pantries, lavatories, stairways, halls, clothing-rooms and dormitories, and they were in a very clean condition. The last mentioned were well ventilated and contained iron bedsteads, neatly made up, with clean bed-clothing.

Buckets filled with water were on each landing as a precaution against fire.

Dietary.—I was present at the pupils' dinner. All cooking is done by the girls in their own building. The boys have their meals carried over to their own quarters, the principal preferring this plan ; each one had a good dinner of hot beef, mashed turnips, bread, tea and milk. The bread was of excellent quality.

Clothing.—There appeared to be a good supply of extra clothing, and each pupil was well and cleanly clothed. The older girls had on neat gray woollen dresses, which had been made by themselves ; all were personally clean, with their hair neatly done.

Class-room.—Miss Wells, the teacher, has entire charge of the class-room. The room is large, airy, well furnished, with maps, lesson-cards, blackboards, &c. Some of the desks are the patent kind, while the others are home-made. The room was in good order and clean.

During the forenoon session there were present in the school-room forty-four pupils ; the total attendance or registered number of fifty-three was accounted for as follows : in school-room twenty-five boys and nineteen girls ; at domestic work in residence, three boys and three girls ; very young children not in the class-room, two boys, and in the Calgary hospital being treated for scrofula, one girl ; total, fifty-three.

As the classes appeared before me in their examination there were six boys and six girls in standard IV ; in standard III, seven boys and five girls ; in standard II, four boys and four girls. The other twelve were juniors, reading from lesson cards or primers. The different classes were taken in rotation in reading, spelling, mental arithmetic, geography, physiology, hygiene and specimens of writing. In reading they did very well, particularly the higher classes. Standard II read too quickly and slurred long words. The spelling was satisfactory, although they were inclined to slur in pronunciation. Mental arithmetic was particularly satisfactory in all the classes, the higher classes answering very difficult but practical questions promptly. In geography, standard III passed a satisfactory examination on North America, and standard IV did the same both on North America and Europe. Physiology and hygiene are subjects which the teacher takes particular interest in, and she has impressed it—to some extent—upon the higher class, especially the girls ; the boys not appearing to be deeply interested in the subject. Standards III and IV had

memorized a good deal of the beautiful poetry and blank verse contained in their readers, being able to recite pages of it with great accuracy ; a profitable thing, as it fills their minds with beautiful thoughts and language, to the exclusion (it is to be hoped) of wicked ones.

The staff of this school is not a large one, but most efficient. Each member, commencing with the principal, appears to take a heartfelt interest in the work far beyond the duty attached to the position. It takes the form of uplifting the individual character of each pupil, and their efforts may have only a transitory influence in some cases, but where it fails, must be attributed to heredity.

Blood Roman Catholic Boarding School.

I inspected the Blood (Immaculate Conception) boarding school on December 20, 1900. It is under the direction of the Roman Catholic mission.

The staff consists of Rev. Father Riou, principal ; Rev. Sisters Gerard, superior ; St. John Proulx, girls' matron ; St. Celestin, boys' matron ; Mary of Good Help, cook ; and Miss Maggie O'Neill, teacher.

Pupils enrolled, boys, fourteen, girls, five, total nineteen, and the number in the class-room was thirteen boys and five girls. The eldest boy was away at the ration-house for beef for the school and hospital, where I saw him.

Class-room.—The pupils were assembled in the school-room neatly dressed and clean in their persons. An address of welcome was spoken by a small boy in a very fluent manner.

The school is divided into two classes, first book, first and second parts. Each class read with fluency, and spelled and gave meanings. They did problems on the blackboard in addition and subtraction, and several children recited the multiplication table as far as three-times. They are being taught to speak out. Each class was placed at the far end of the school-room while being examined. Their accent is not good, this may be attributed to their environment, for although most of the ladies, particularly the teacher, speak English fluently, French is their mother-tongue.

Very neat copy-books were exhibited as specimens of the pupils' writing and composition, these were creditable to the pupils as well as the teacher. The class-room is appropriately furnished with twelve patent desks, and on the walls are two blackboards, lesson-cards, maps, &c. There appeared to be a sufficient supply of books, slates, pencils, &c.

Dietary.—The children appeared to be well nourished and in a healthy condition, with the exception of one small boy who had his head bound up, having an open scrofulous sore.

I inspected the other departments of the building. The dormitories are large, airy and clean ; the iron cots were neatly arranged with wool mattresses and clean bed clothing ; lavatory conveniences are contained in each dormitory ; the kitchen and dining-rooms are well arranged and clean. Under the building are dugouts containing bins, holding potatoes, turnips, &c. Also one furnace under each wing of the building and fuel bins.

Forty-eight hand fire-grenades are hung in convenient places about the building, and there are also fire-axes and fire-pails filled with water on each landing, also patent fire-extinguishers.

There is a neat fence in the foreground of the building, the premises are neatly kept.

I checked the inventory of government property and found it correct and to agree with the last quarterly return.

Blood Hospital.

I inspected the Blood Hospital on December 20. It is now, and has been, since its establishment in 1893, under the supervision of the Grey Nuns.

Staff.—The official staff consists of Superior (matron), Rev. Sister St. Eusèbe, and two nurses, also two other sisters, of whom one cooks while the other one has all the hard work of the laundry and other housework to do.

On the day of my visit there were three male and three female patients in the hospital. Of the former, one is Charley, a Peigan, who has been an inmate for over two years, his complaint being scrofula and incurable. The two others are ill, one with scrofula and the other with consumption ; they have been almost constant inmates for a very long time. The female patients were the victims of accidental burning. The older woman's clothes caught fire and the younger one was burned in extinguishing it. The other old woman has bronchitis ; she has been an inmate for two months.

A death (Stephen Dacota, an ex-industrial school pupil), recently occurred here.

I inspected the sick wards, kitchens and laundry. The whole are kept clean and in good order.

I also inspected the books and found them neatly and accurately kept.

Peigan R. C. Boarding School.

In company with the agent I visited and inspected the Peigan Roman Catholic (Sacred Heart) boarding school on January 22.

Staff.—Rev. Father Doucet, principal ; Rev. Sister St. Patrick, superior and teacher ; assisted in the various duties of the residence by Rev. Sisters Julien, Gelinas, Frudel and Leblanc. The pupils enrolled are fifteen girls and ten boys ; of these there were present in the class-room ten girls, ten boys and three half-breed children not on the roll. The absentee girls were, two at home on sick leave, one at home on leave on account of her brother's death, and two were ill in bed in the sick room of the school. These latter I saw ; they did not appear to be seriously ill. One pupil, No. 07, Catherine Jack, is suffering from an open scrofulous sore on her neck.

Class-room.—The school was opened by the pupils singing a hymn of welcome, followed by a recitative address from one of the girls and one of the boys.

The classes A, B and C, second book, were called up in rotation. Each child of the several divisions read fluently, spelled correctly and wrote on his slate from dictation ; all this was done promptly and satisfactorily. The two eldest girls did problems in long division on the blackboard, and showed a general familiarity with multiplication and subtraction. The juniors read from tablets and showed knowledge of general rudiments. The pupils were very clean, their hair neatly done, and were uniformly dressed in good material, and had on good stockings and boots. They looked healthy, with the exception above noted.

I inspected the dormitories ; the iron bedsteads were neatly made up with comfortable and clean bed clothing ; the rooms are well ventilated and everything is in good order. The kitchen has received a new fine large cooking-range since my last inspection. The boys' and girls' recreation-rooms and also the work-rooms were clean and comfortable.

Peigan C. E. Boarding School (Victoria Home.)

My inspection of this boarding school took place on February 1, 1900. I was accompanied by the agent.

Staff.—W. R. Haynes, principal ; Mrs. Haynes, matron ; Miss M. Allworth, girls' matron, and C. H. Collinson, teacher.

Pupils Enrolled.—Boys, thirteen ; girls, sixteen. Eight pupils were absent.

Of the twenty-one pupils present in the school—boys, ten ; girls, eleven—all appeared healthy and well. One child was reported as showing symptoms of scrofula, the glands of the neck being much swollen.

Class-room.—Mr. Collinson is teacher. This room is bare of proper school furniture. The pine (only) desks are home-made ones ; the rest of the pupils sit about on benches without backs. Two lesson-cards and a small blackboard are on the walls. Four boys read in the second book and may be classed as three in standard II*b*, and one in standard II*a*. Two other boys read in the first part of the second book ; six pupils read from the first book, part I ; five pupils read from the primer, and one is learning her letters. Three little girls did not appear in the class-room while I was there. The four older boys read fluently and spelled all the words correctly. They recited the multiplication table, and did some mental arithmetic. The boys in the first book also read fluently, they all speak out clearly and promptly. Each one wrote his or her own name on their slates. Most of them wrote very well indeed.

The pupils range in age from six or seven to fourteen years. Two of the older boys are to be sent shorty to the Calgary industrial school, that they may be taught a trade.

As before stated, they all appear to be healthy and were well dressed and clean in their persons.

Dormitories.—These are airy and clean. The iron cots appeared to be comfortably supplied with bed clothing, and were neatly made up. There appeared to be a good supply of extra clothing on hand.

Lavatories.—There is one each for the boys and for the girls. These were clean and easy of access.

Dietary.—The pupils have every appearance of being well fed. The principal informed me that he was out of potatoes, but did not say what he issued as a substitute for them. Vegetables must be liberally supplied in these schools, also dried fruit, or the children will soon suffer in their health.

St. Albert Boarding School.

Accompanied by the agent, I drove direct from Edmonton to the St. Albert boarding school on Tuesday, March 12, and commenced my inspection of the classes during the forenoon session.

Rev. Sister Dandurand, principal, received and immediately conducted us to the class-rooms. There are three class-rooms and four governesses—all English-speaking. Upon entering each class-room we were received by the pupils standing and singing in a very correct manner—songs of welcome.

As the Indian pupils are only a moiety of the pupils in each class-room, I asked to have them paraded before me in classes by themselves. After hearing each class, read, spell, examining their copy-books, I requested them to return to their seats, and each one (of the higher classes) to write his or her number, name, age and standard on their slate. I was well pleased with the progress of the pupils ; they read clearly, distinctly and understandingly, with but little Cree accent. This latter many be accounted for by the early age at which most of them were received into the school. They were able to spell what they read in a free and off-hand manner. Their writing is good, following the fancy of the age, being vertical—personally to me it is objectionable.

I observed no unhealthy-looking child, and the principal informed me that both of the sick-rooms were vacant. They were all well dressed in their ordinary clothes—my visit being unexpected—well washed and their hair neatly done.

The total number of pupils on the school register, 73 ; total in class-room, 41 ; in sewing-room, 2 ; pupils seen by inspector, 43 ; to be accounted for, said to be at work, 30.

I was present at the pupils' dinner ; it consisted of a fine rich vegetable stew and light white bread *ad lib.*

The class-rooms are well furnished with patent desks, blackboards, maps and lesson-cards on the walls. They are well lighted and not over-crowded. It is needless to say that cleanliness prevailed throughout.

I was shown through the dormitories of both boys and girls, comfort and cleaniness obtained throughout. The large new chapel in the main building is now used and pupils have not to go out for early morning prayers as formerly.

The main building has been added to, and is now two hundred feet long and fifty feet wide. It is a model of convenience and comfort, and attached to each dormitory are bath-rooms, lavatories, &c.

Joseph's Reserve (R. C.) Day School.

This school is situated on Joseph's reserve, Lac Ste. Anne. I visited it in company with the agent on August 20.

Severe Callihoo is teacher ; he is an ex-pupil of St. Joseph industrial school and a treaty Indian of Michel's band. There were present six pupils, viz.: four boys and two girls. There are eighteen names on the school register. The absentees—whereabouts reported by the teacher to be—one at St. Albert, two at White Whale lake, two at hay-fields, one at home on the reserve, two in the bush ; of the other four he could not give any information.

Those present said their lessons in reading and wrote their names on their slates. They are only advanced as far as words of two syllables. The school-room was clean and tidy, as were also the surrounding premises.

The teacher is married and lives in a good dwelling adjacent to the school and built by the mission ; he appears faithful and honest in the performance of his duties.

St. Joseph's Industrial School.

I inspected this institution in April last.

Staff.—Rev. Father Lepine, principal ; H. F. Dennehy, assistant principal and accountant ; P. Monaghan, teacher, senior boys ; F. Dennehy, teacher, junior boys ; lay brothers, Tom Markin, farming instructor and stockman ; John Markin, engineer, miller, gardener and blacksmith, and Jean Smith, baker ; Rev. Sisters Machelosse, matron ; Mongrain, assistant matron ; Kelly, teacher, girls ; Maturin, seamstress ; Le Blanc, cook.

Attendance.—There were fifty-one boys and twenty-one girls ; total, seventy-two pupils enrolled and in attendance at the time of my inspection.

Office.—The book-keeping is performed in a most efficient manner upon the principles of double entry, which admits of no clerical errors in producing a correct monthly trial balance. I made a thorough audit of the books and accounts and produced a balance-sheet showing the financial condition of the school. It has been managed honestly and as frugally as a proper regard for the physical condition of the pupils would admit.

The staff of this school is sufficient for one hundred and twenty pupils, consequently with the present attendance (72) the percentage of expenses for staff, heating, &c., per capita, is greater than it should be. The only proper remedy is to increase the attendance up to the full capacity of the school and thus make the income fit its expenditure.

Most of the industries carried on, help to support the school, as well as the teaching they afford the pupils.

Great profit is made out of the live stock. Fat steers are sold at the highest prices while fat dry cows are beefed for the school. The same regarding hogs—the choicest and most merchantable are sold, while the others and their products are consumed. A large surplus of potatoes and oats was sold at good prices. All the milk required for the pupils is from their own cows. Large numbers of poultry and eggs are produced and consumed.

The large gardens are most successfully managed ; vegetables of all kinds are grown in abundance ; these are tastefully prepared and appear at every meal, which in a measure accounts for the uniform good health of the pupils.

Farming.—Lay Brother Tom Markin has charge of the farming and live stock. During 1900, the following crops were harvested : oats, twenty-six acres—yield, one thousand and nineteen bushels ; rye, one hundred and eighteen bushels ; barley, five acres—yield, two hundred and forty-six bushels ; wheat, six acres—yield, one hundred and seventeen bushels. The total yield of grain was fifteen hundred bushels. Potatoes, six and one-half acres—yield, seven hundred bushels ; turnips, ten acres—yield, two thousand bushels, and brome-grass seed, three hundred pounds.

The garden yielded one thousand heads of cabbage, twenty bushels of onions, forty bushels of beets, fifty bushels of carrots. Most of these products of the fields and garden were fed to live stock and used in the school kitchen. Twenty-one cows and steers were stall-fed on turnips and crushed grain during the winter, beefed or sold on foot for beef. Thirty-five pigs were made into pork, some of which was sold in Calgary. The remainder of the live stock were kept in good condition by the product of this farming. Potatoes were sold in Calgary.

The principal objects in view in the farming operations here are (*a*), teaching the pupils mixed farming ; (*b*), to grow food for the pupils and staff ; (*c*), provision to winter well the live stock ; (*d*), the girls are taught in the kitchen to cook and prepare, and make palatable, the different kinds of vegetables.

The older boys are thoroughly trained in the work of farming and feeding pigs, cattle and horses ; both stall-feeding for pork and beef, and simply wintering stock.

When I was at the school in April, spring seeding was on. Every morning three to six span of horses belonging to the school—each team in charge of a pupil—were off early to the fields, and remained there all day at work under direction of the farming instructor, Tom Markin, ploughing, drilling and harrowing in the grain. A younger lot of boys under the direction of the gardener, John Markin, were engaged in making hot-beds, digging, raking, tree-planting, &c., in the large gardens near the school.

Live Stock.—I had all the cattle brought together into the barnyard, classified and counted them, they consisted of two thorough-bred pedigreed, short-horn bulls ; three cows, short-horn ; thirty-three grade milch cows ; thirty heifers, over one year old ; forty-one steers ; five spring calves ; total, one hundred and fourteen head. In addition to the above-mentioned cattle there were fifty-five head the property of the pupils. The horses consisted of eleven work-horses and mares ; ten colts and fillies up to three years old ; four native ponies, and a thorough-bred shire stallion. The stallion is a perfect animal of his class with a registered pedigree.

The plan of having the pupils invest their money, earned under the 'outing' system, in heifers, was inaugurated by ex-principal Naessens in 1897, since which time they have owned one hundred and thirty-five head. From time to time as pupils finished their schooling they returned to their reserves and took their cattle away with them, or, if they had no tribal connection, as in the case of pupil No. 128, Ed. Beauchamp, who left the school June, 1900, sold their cattle. This pupil had six head, which he sold for one hundred and thirty dollars cash. As the number of pupils attending the school decrease, and the age of leaving (18) is more rigidly enforced, the opportunity of earning money by the 'outing' system has almost ceased. As the older pupils are now all required to conduct the farm work for the school, soon the

pupils will own no cattle at the school, but while the system lasted, it was the best direction in which to invest their earnings.

Carpentry.—In consequence of depletion in the attendance of pupils, drastic measures had to be taken by the principal to reduce the expenses, therefore, since July, 1900, there has not been a carpenter instructor employed here. This is much to be regretted, as it is the trade that most Indian boys delight in, and one they have the greatest use for on their return to their reserves.

Shoemaking.—An ex-pupil, Louison, a Sarcee, was engaged here at good wages for a couple of months during the past winter, repairing boots and harness ; but no regular shoemaker is kept. It is a poor trade even for white men, as they cannot compete with machinery. When wages and board are considered, it was found it did not pay to keep one constantly, even for repairing.

Bakery.—A baker is kept, whose duties, besides baking, are the butchering of cattle and hogs.

Engine-house and Chopping Mill.—Chopping grain for neighbouring farmers for toll, did not, in the opinion of the principal, pay for the extra fuel consumed, so he discontinued the practice. The work is now confined to chopping the school's own grain, and pumping water for all the buildings, and supplying the laundry with both hot and cold water.

Girls' Department.—There are so few large girls now in this school, the work comes harder on them than formerly.

Laundry.—The boys wash their clothes on Mondays, and the girls have possession of the laundry on all the other days of the week for their own clothes and the household napery. The girls do also all the mending and darning.

Dietary.—The meals are all prepared and served in the girls' building, all dine in the same hall at the same time.

Clothing.—All the girls were particularly well and appropriately dressed ; all had on good boots and stockings. They all looked bright and neat, and their hair was neatly arranged and set off with a ribbon.

Religious Instruction.—Regular classes are held between four and six p.m., when the Rev. principal takes the children, by classes, for religious instruction, and these classes being in relays, it does not interfere too much with necessary recreation.

Games.—As spring advanced and the ground became dry, the boys were taking up football, and the girls croquet for evening amusement.

Health.—At the time of my inspection there was not a case of serious illness in the institution. A couple of boys had been laid off for a day or two from colds, but they were not sufficiently serious to require a doctor. The doctor had only visited the school once or twice during the fiscal year, and his last visit had been made solely for the purpose of vaccinating the pupils.

Fire-extinguishing Appliances.—These were kept in order, and I observed the fire-buckets were kept filled with water, on the different landings at the head of the stairs.

Discipline.—The hours for rouse, prayers, church, meals, work, classes, recreation and bed-time were punctually observed. In no other school have they been more carefully followed. English is the language of the school for both work and play. The pupils are very well behaved, they are taught to practise politeness, and there is no mistaking a St. Joseph's school boy or girl, on this account, wherever one may meet them.

Class-rooms.—*Senior Boys' Division.*—P. Monaghan, teacher. I attended four sessions of this division in order that I might meet all the pupils, as these elder boys work half each day, and attend classes alternately. The total number in this division was thirty.

These different classes were examined in reading, spelling, definitions, meanings, composition, dictation, arithmetic, mental arithmetic, geography and general know-

ledge. Each according to its standard did very well, and showed progress since my last inspection.

Junior Boys' Division.—F. Dennehy, teacher. There are twenty-one boys in this class-room.

The boys of the second book were examined in reading, spelling, dictation, composition, writing, arithmetic, mental arithmetic. Such an array of subjects seems a big contract for such young pupils, but they did remarkably well in all of them ; of course they have not got beyond the rudiments in any of them.

The pupils of senior first book, did well also up to their grading. The five junior boys are bright in intellect, and they already know what they are talking about.

Mr. Dennehy is an experienced teacher of Indian children, having taught the Catholic boarding school at Touchwood Hills for years.

Girls' Class-room.—Rev. Sister Kelly, teacher. There were twenty-one pupils present. Each class was examined in turn, commencing with the lowest. I have much pleasure in noting very great improvement in all these classes since my last inspection.

The children spoke out distinctly and answered questions clearly and promptly. Their reading has improved, they spelled all the words of their several lessons ; they write well, some of the older girls being quite artistic in engrossing addresses presented to the Rev. Father Naessens on his leave-taking for Europe.

In mental arithmetic they were bright and prompt in their answers, and they showed reasonable familiarity with the geography of Canada. Their drawing-books were shown, they are very creditable, also their copy-books.

All the girls were well and becomingly dressed in clothes made by themselves, except of course the younger ones who have not advanced to that.

I regret that all these girls could not be suitably and happily married before leaving the school. Their homes on the reserve will have many drawbacks ; but if they went home married women, they would be safer. Their good principles are too recently inculcated, they inherit none of them, consequently they are very superficial and near the surface, and their heredity draws them in the opposite direction. It is expected that at least five of the senior girls will leave the school July 1.

Louis Bull's (Methodist) Day School.

I visited the Louis Bull's day school, accompanied by the agent on June 25 last, afternoon session.

The teacher, Mrs. Goodhand was on temporary leave of absence, and her duties were performed by Mr. W. B. Jones, a qualified teacher.

There are seven pupils on the roll, five of them were present. The children were well washed and combed and were cleanly dressed in the linen blouses, skirts and trousers provided for them by Mrs. Goodhand, and kept at the school ; the system of regular bathing the children at the school is still kept up.

The pupils were put through reading from cards, counting, addition and subtraction, mentally in simple questions, days of the week, English names of different objects, &c. They show intelligence and care in teaching since my last visit ; as the eldest child is but ten years of age, they did very well.

The school-house has been improved and made quite comfortable. It has been lined throughout with tongued and grooved lumber and a porch built on. All was clean and bright, even to the windows, the stove and stove-pipes. The register was regularly kept.

SAMSON'S DAY SCHOOL.

I visited the Samson's day school on Wednesday, June 26, afternoon session. Teacher, Orrin C. German. There were twenty Indian children enrolled on the school register, only nine of them were present. The school register was irregularly kept.

The attendance of the children has been very irregular during the past year, and consequently little or no progress can be reported.

The school-house has been thoroughly repaired and placed in a good and comfortable condition. It was clean and in good order.

I have, &c.,

T. P. WADSWORTH,

Inspector of Indian Agencies.

BRITISH COLUMBIA,

ALBERNI BOARDING SCHOOL,

ALBERNI, July 13, 1901.

The Honourable

The Superintendent General of Indian Affairs,

Ottawa.

SIR,—I have the honour to submit the annual report of the Alberni boarding school for the year ended June 30, 1901.

Location.—This school is located on the banks of the Somas river, close to the Shesaht village. The school is two and a half miles from the village of Alberni.

Land.—There are sixteen acres of land in connection with this school. With the exception of a small part of rocky surface, the rest of the sixteen acres is good arable land, when cleared. The sixteen acres is part of lot 81, district of Alberni. This land was bought by the Presbyterian Church for the purpose to which it is now set apart.

Buildings.—The main building is used as a residence for both staff and children, the school-room is situated fifty yards from the main building. A house close to the main building is used for bake-shop, laundry, carpenter-shop and boys' play-room. During the year a great deal of painting has been done inside the building, a new floor was also laid in the kitchen.

Accommodation.—There is accommodation for forty-five pupils and a staff of five.

Attendance.—There are forty-one children on the roll, twenty-six boys and fifteen girls ; six boys and four girls have been admitted during the year.

Class-room Work.—The programme of studies authorized by the department is followed ; special attention being given to writing, reading and the use of English.

Farm and Garden.—The garden did very well, we had a fairly good crop of potatoes ; from the orchard we had a fine supply of plums, apples and pears. Some clearing has been done, also some stumps taken out.

Industries Taught.—The boys are taught farming, gardening, carpentering, painting and baking. The girls are given a thorough knowledge of housekeeping, cooking, laundry and sewing ; music is also taught.

Moral and Religious Training.—The children attend St. Andrew's Presbyterian church in Alberni every alternate Sabbath, the other Sabbath having service in the school when their parents also come. Sabbath school every Sabbath at 3 p.m. and Christian Endeavour meeting every Wednesday evening. Some of our pupils and ex-pupils have united with St. Andrew's church, Alberni. The conduct of the children has been all that could be desired.

Health and Sanitary Condition.—The health of the children has been fair. With the wet, cold spring, we had a great many cases of bad colds, and in one or two cases complications set in, making it more serious ; they are all now fairly well. As we are situated on a hill sixty feet above the level, our sanitary arrangements are good.

Water Supply.—The water that is used for the school is pumped from the Somas river by the windmill, there is a well for drinking purposes.

Fire Protection.—Four Carr fire-extinguishers are placed through the building. Fire-pails are kept full in convenient places.

Heating and Lighting.—The school is heated by furnace in basement, ordinary lamps are used for lighting the building.

Recreation.—The boys' chief recreation is football and athletics ; the girls are also fond of outdoor games ; in winter indoor games are provided.

I have, &c.,

JAS. R. MOTION,
Principal.

BRITISH COLUMBIA,
CLAYOQUOT (BISHOP CHRISTIE) BOARDING SCHOOL,
CLAYOQUOT P. O., July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—The Clayoquot (Bishop Christie) boarding school enjoys an ideal location on the gently rising northern shore of St. Mary's bay, in Clayoquot sound, on the west coast of Vancouver island, about two miles from the Opitsat reserve, and three miles from Clayoquot post office : it is distant enough to secure privacy and near enough to be of easy access. Verdure-clad mountains and mighty veterans of primeval forest afford it cozy shelter against the prevailing winds.

Land.—The school owns one hundred and ninety-one acres, known as the fractional south-half of section 11, township 1, on the official survey of Clayoquot district. The land, however, is covered with heavy timber and vigorous undergrowth, but it bids fair to make good grazing land at the cost of much money and labour.

Building.—The building, 40 x 60 feet, frame, is divided into two separate equal parts, one for boys and one for girls. On the first floor are found the parlour, the office, the kitchen and separate dining-rooms and class-rooms. The second floor comprises the chapel, two officers' bed-rooms, and two dormitories, with twelve beds each. In the attic are two more dormitories with thirteen beds each, and two small bed-rooms. The children's bedsteads are all iron, white enamelled, and each bed is furnished with excelsior mattress, two heavy woollen blankets, double sheets, one feather pillow and one white spread. All the rooms are high, airy and well ventilated ; the class-rooms are provided with large windows, admitting a flood of light.

Accommodation.—There is good accommodation for twenty-five boys and twenty-five girls, fifty being the authorized number.

Attendance.—There were twenty-eight pupils on the roll on July 1, 1900, sixteen boys and twelve girls. During the year there were admitted sixteen pupils ; nine boys and seven girls, making the present attendance forty-four. The average attendance for the year was thirty-three.

Class-room Work.—The course of studies outlined by the department is followed as closely as possible. All pupils without exception have made very good progress in the past year. The boys and the girls are taught in separate class-rooms, each with their own teacher. In speaking English the girls show greater proficiency than the boys, though the boys seem to understand better.

Farm and Garden.—As intimated above, the land connected with the school is not cultivated as yet, but with the help of the senior boys the foreman succeeded in clearing a few patches this spring for raising vegetables. Some of the boys prepared the place in front of the building for a lawn, and planted it with roses and other flowers ; the junior boys have charge of the sprinkling in the dry season.

Industries Taught.—Three boys are learning the carpenter's trade. They, with the help of their instructor, erected and finished a woodshed, 36 x 50 feet, under the roof of which the carpenter-shop is located. Four boys in charge of a competent foreman painted all the rooms in the school building. Six boys are as good as professionals in making the bread, judging from the quality of the bread they bake. Some of the boys are appointed to split the fire-wood and carry same to the kitchen daily.

The girls attend to the general housework and take their turns in assisting the cook. Some of the girls are fully competent now to prepare the meals for the children, without assistance from the cook proper, and to stimulate their ambition, they are given opportunities at regular times to exhibit their attainments. In the sewing department the girls receive regular instruction in hand and machine sewing, in cutting and finishing dresses, in knitting, darning and mending ; not a few are doing surprisingly good work in this line. Those showing particular skill and taste are instructed in fancy work. Three to four hours a day are devoted to sewing. Two boys are also taking lessons in mending and in hand and machine sewing.

Moral and Religious Training.—All the pupils receive daily instruction in matters of religion and sound morals ; persuasion and example being the guiding principles. The conduct of the children throughout the whole year has been all that could be desired.

Health and Sanitary Condition.—The health of the children has been very good. One boy, however, succumbed to a disease that he brought to the school, the serious nature of which, unfortunately, was not discovered till some months after his admission. One girl whose health proved rather delicate, was allowed out on sick-leave for an indefinite time. Outdoor exercise is strictly insisted upon, whenever practicable. The sewerage is first-class. Ventilation is daily attended to. One year's experience is sufficient to show that for sanitary condition the school is most favourably located.

Water Supply.—There is an abundant supply of good, cool, crystal water, which is pumped from a clear, mountain stream, by a hydraulic ram, into two tanks of fifteen hundred gallons capacity ; these are placed sufficiently high to force the water through all parts of the building. An eight hundred gallon tank, is placed near the kitchen and is constantly kept filled with rain water.

Fire Protection.—This is still rather deficient, as the fire-buckets and the fire-extinguishers applied for have not been supplied as yet. There are taps on each side of the building, on every floor, and fire-hose in convenient places is kept in readiness for emergencies. Fire-escapes have been provided this year.

Heating and Lighting.—All heating is done by means of stoves ; for lighting, coal oil lamps are used.

Recreation.—For all kinds of outdoor exercise and games, the beach at low tide offers the pupils a unique play-ground. The boys delight in football, baseball, jumping, vaulting, foot-racing, marbles and in boating and canoeing. Two croquet-grounds, one for boys and one for girls, are near the school. The girls have two swings on their play-ground. For the rainy season both boys and girls are well provided with all kinds of indoor games, such as checkers, chess, dominoes and crokinole.

General Remarks.—This school has now been open for a little over a year. The results obtained in this comparatively short time are beyond the most sanguine expectations, and prove the wisdom, and the necessity, of providing a boarding school for the west coast of Vancouver island in a very striking manner. The parents, who, with much reluctance and many misgivings, consented to place their children in the school a year ago, now express satisfaction with their action. Others, who threatened to withdraw their wards, to-day are loud in their praise of the good the school is doing. The children themselves have undergone a wonderful change for the better. The eyes once filled with tears, now beam with joy ; and the poor little hearts aching under the weight of homesickness but a year ago, to-day swell with delight at having found in the school a new and more comfortable home. Surly looks yielded to sweet smiles, and sounds of complaint, to ripples of merry laughter. An air of contentment pervades the whole school in so visible a manner as to impress visitors at once. Averse as were the girls generally to every kind of work, they now vie with one another to be allowed to do some task or other. Once convinced of their own progress, they submitted confidingly to the firm and mild discipline in force at the school. The promptness, and the joy, with which they return to the school, when allowed to visit their homes, best prove how much they have grown attached to the school, which they regarded a prison in days gone by. When the superintendent granted permission for three weeks' holidays in June, he wisely and prudently suggested that the children be allowed two weeks' vacation, with one week's grace to hunt them up. The school being a new one, and the children undisciplined in consequence, it was much to the surprise and satisfaction of the officers that all children, without exception, returned promptly, with smiling faces and tearless eyes ; some returning, even days, before the expiration of their time. There was no necessity of hunting any of them up.

In concluding my report, I beg leave to express my indebtedness to our agent, Mr. Guillod, for the many services he has rendered the school, and the interest he has taken in its success during the year.

I have, &c.,

P. MAURUS,
Principal.

BRITISH COLUMBIA,
THE PORT SIMPSON GIRLS' HOME,
PORT SIMPSON, June 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report of the Port Simpson (Crosby Girls' Home) boarding school, for year ended June 30, 1901.

Location.—The school is located at Port Simpson, British Columbia, and is situated just outside the limits of the Tsimpshean reserve.

Land.—The land is owned by the Women's Missionary Society of the Methodist Church, Canada. There is an area of two acres, which is well fenced, but for the most part in a rough condition. The land lies on the slope of a hill, the greatest elevation being toward the south and east. The character of the soil is swampy, and requires thorough draining to fit it for cultivation, or for use in any way. During the year, a deep ditch has been dug in rear of the play-ground and drying-ground, rendering both quite dry in every part. The land was acquired by purchase from Mr. Gordon Lockerby, Port Simpson. It is technically known as section 4, township 1, range 5, coast district.

Buildings.—The buildings consist of a house, wood-shed, tank-house, play-room, chicken-house, drying-shed and water-closet. The drying-shed was erected during the year. The dimensions are 20 x 24 feet. The house has been painted on the outside, and roof and verandahs repaired ; storm-doors and windows have been provided for north side of kitchen and laundry.

Accommodation.—Accommodation can be provided for forty-five pupils and four teachers. The building was erected with a view to accommodating fifty pupils, but it is found that the class-room and sewing-room would be too crowded with so large a number in attendance.

Attendance.—The average was 39·73, and the enrolment, 49. The present number in attendance is 36.

Class-room Work.—In the class-room good progress has been made. A very successful school examination was held in December and prizes awarded those who made highest marks in the written examinations held in November. Prizes for reading, spelling and writing were also awarded in the primary classes.

The subjects taught are, reading, writing, arithmetic, spelling, geography, history, hygiene, music, Bible history and doctrine and the Methodist catechism.

Garden.—A few flowers, vegetables and berry bushes, have been cultivated, but owing to unfavourable conditions of soil, and climate, little can be accomplished in this line.

Industries Taught.—The industrial teaching consists of instruction in general housework, laundry-work, cooking and bread-making. Careful instruction is also given in sewing, knitting and fancy work. Under the supervision of teachers in the different departments, all the work of the institution is performed by the pupils.

Moral and Religious Training.—The pupils are carefully trained to be honest, truthful, obedient, industrious, kind and obliging. A Bible lesson is taught each day, and religious instruction takes a prominent place in the school routine.

Health and Sanitary Condition.—The sanitary condition is good and drainage excellent. The general health of pupils has been fairly good. Three deaths have occurred, all of which could be traced to tubercular weakness.

Water Supply.—The water-supply is derived principally from a stream at some distance from the house, and is conducted by a flume into a tank, from which it is distributed through the house by means of pipes. The rain-water from the roof is also received into the tank. All water passes through a filter before flowing into the tank.

Fire Protection.—Fire-escapes have been purchased and put into place during the year, furnishing means of escape from the two upper flats and from all the dormitories. Besides the fire-escapes, there are two stationary ladders on the roof, and one always in place from the ground to the roof. Two lighter ladders are also on hand for moving from place to place. Eighteen water-pails are available in case of fire. Two chemical engines and one fireman's axe are also on hand. Mention may also be made of the efficient and well-equipped fire-brigade organized in the village, and within call at short notice.

Heating and Lighting.—Heating is furnished by seven stoves and one open grate. Coal oil lamps are used for lighting. Hanging and bracket lamps are used exclusively in the pupils' apartments.

Recreation.—Regular hours are set apart for recreation, which consists of games, music, walking, boating and general play. Club-swinging is practised, and exercise in the open air encouraged and enforced.

General Remarks.—The year has been characterized by a spirit of contentment and cheerfulness on the part of the pupils, to whom the routine of the establishment means a full portion of hard work and study, though there is always an effort to lighten labour by variation. For instance, in the sewing department, hours are given to

fancy work, and, as a result, the sum of fifty dollars was realized from a sale of work and the proceeds devoted to the Port Simpson hospital.

Owing to the illness of one member of the staff, and the departure of another, supplies have had to be arranged for at different times, but early in June our permanent workers were fairly installed and are now well acquainted with their various duties.

The school prizes take the form of books, and great interest is taken in their perusal. Several of the more advanced pupils have always a book at hand to pick up at odd moments, and are never happier than when employed with their reading.

The pupils are arranged in sets and pass from one department to another each week. We find the weekly system most satisfactory, and I am pleased to say that the pupils perform their duties in a very creditable manner.

Altogether, there is much reason to be gratified with the results of the year's work, though conscious that higher attainments lie quite within the range of possibility, and to which we hope yet to rise.

I have, &c.,

LAVINIA CLARKE,
Principal.

BRITISH COLUMBIA,
ST. MARY'S MISSION BOARDING SCHOOL,
MISSION CITY, July 30, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—The St. Mary's Mission boarding school is delightfully situated on the north bank of the Fraser river, about one mile east of Mission Junction, a station on the Canadian Pacific railway. A splendid view of the river and surrounding country can be had from the buildings. The Cheam mountains lie to the east, Mount Baker rises majestically in the south, which, with several other perpetually snow-clad peaks, form the background of a scene which equals any other in British Columbia.

Land.—The farm attached to the school consists of some three hundred and sixty acres of land, the property of the Oblates of Mary Immaculate, who, without any remuneration whatever, have generously handed over the use of it for the benefit of the school. The said farm is in the Mission district municipality, section 2, townships 3 and 4. The land being a belt of sandy loam is best adapted to fruit-culture It yields also fair crops of roots and hay.

Buildings.—The two schools for boys and girls respectively are frame buildings and stand four hundred and twenty feet apart on a beautiful plateau some two hundred feet above the level of the Fraser river. Their situation is most attractive and never fails to elicit the attention of the passengers on the river boats and the Canadian Pacific railway.

The boys' school consists of a main building, 90 x 45 feet, which includes chapel, class-room, library, parlour, dormitory, bath-rooms, toilet-rooms, principal's and teachers' rooms, refectory and kitchen. Another building, 24 x 40 feet, attached to the main one, contains two class-rooms, band-room, shoemaker and carpenter shops and two bed-rooms.

The girls' home consists of a main building, 90 x 45 feet, with a wing, 24 x 45 feet, and contains chapel, class-rooms, parlours, bed-rooms, sewing-room, recreation-room, dormitory, bath-rooms, toilet-rooms, infirmary, refectory and kitchen.

The girls' division has all been repainted a few months ago, part of the work being done by the pupils under the direction of an able painter. The foundations of the boys' school have been thoroughly renewed and a handsome veranda has been added to the front.

The outbuildings are the laundry, the play-house for the boys, wood-shed, store-houses, stables and barns.

Accommodation.—The school can fairly accommodate eighty pupils and necessary staff ; though it is to be regretted that the dining-room and the infirmary of the boys' school and the sewing-room of the girls' are rather small.

Class-room Work.—The class-room work is conducted by Mr. T. Theroux, for standards I and II, and by Mr. McKinnon for the more advanced pupils. Reverend Sisters Mary Conception and Mary Lidia competently conduct the class-room work in the girls' school.

Remarkable progress has been made in reading and spelling.

At the end of the year the grading was as follows :—

Standard	I.	15
"	II.	21
"	III.	23
"	IV.	10
"	V.	6
"	VI.	2
		77

Attendance.—The average attendance this year at the respective schools has been about thirty-five boys and forty girls.

Farm and Garden.—The boys are taught the art of farming and gardening, and the large majority of them give evidence of special aptitude in this line, taking at the same time a great interest therein. The lawns with their flower beds in front and immediate surroundings of the buildings so neatly kept by the pupils themselves, exhibit their good taste and add much to the general good effect of their home.

In connection with the school is a vast orchard with its many apple, pear, cherry, peach and plum trees. The fruit crop is generally plentiful. Last year, however, owing to the ravages of the cut-worms, it was a partial failure.

A good supply of vegetables is yearly raised in the garden, half an acre of which is planted in strawberries and about the same extent is covered with raspberry, currant and gooseberry bushes.

Industries Taught.—Three boys have been instructed in carpentering, and one was successfully practising shoemaking. The majority of boys are employed at farm labour and horticulture

The girls are taught all kinds of housework, such as cooking, baking, laundry work, sewing, fancy work, the making of artificial flowers, &c.

Moral and Religious Training.—Half an hour every morning is devoted to memorizing the rudiments of the Catholic doctrine. A short conference is daily given by the Rev. principal with a view to impress upon the pupils' minds the importance of regulating their conduct according to the sound principles of morals and religion. It is but justice to say that the moral conduct has been very good.

Health and Sanitary Condition.—Every attention is paid to the sanitary condition of our institution. The local doctor is called for the slightest indisposition of any of

the children, and in cases where contagious diseases are brought from Indian camps, discharge of such pupils as are afflicted with the sickness is immediately asked for. Owing to the ability and devotedness of the nurse, the health of the pupils in general has been good. A few pupils had to be discharged on account of weakness or ill health, but no death occurred in our midst.

Water Supply.—An abundance of excellent water is supplied from a never-failing mountain stream, known as the Mission creek. It is conveyed in pipes through the entire buildings.

Fire Protection.—The school is provided with four chemical fire-extinguishers, four fireman's axes and forty-eight pails constantly kept in readiness. Exercises are held frequently and the children are drilled in such a way that should a fire occur while they are in bed, they could dress and be down the fire-escape in four minutes. The bigger boys are taught the use of the fire-appliances on hand.

Heating and Lighting.—All the heating is done by means of wood-stoves. There is an abundance of wood to be had on the Mission land. The larger boys do the most of the sawing and chopping required.

Light is supplied by coal oil lamps.

Recreation.—When the weather is favourable the pupils enjoy outdoor games in their large respective play-grounds. Football, baseball and handball are indulged in by the boys. Occasionally one sees two well trained and more or less warlike battalions drilling each in its own field and finally meeting for a harmless contest. There is an artificial pond for the purpose of bathing, near the school. It is provided with excellent water by the Mission creek, and is much patronized during the summer months.

The play hours in winter are for the greater part passed indoors, where games, such as checkers, dominoes, lotto, &c., are indulged in. When the weather permits, sleigh-riding is allowed and, I need not add, very much enjoyed.

The girls take great pleasure in playing croquet and most of the games suitable to their sex.

General Remarks.—Special mention must be made of our brass band, which enlivens the concerts given occasionally in the school, as well as the picnics and other respectable parties in the vicinity. This year, on the whole, an exceptionally marked progress is noticeable.

I beg to express my sincere thanks to the Indian Superintendent, who, on every occasion shows a very favourable interest in our work ; also to Mr. F. Devlin, our Indian agent, who does not fail in his frequent visits, as well as in his correspondence, to evince marks of kindness and appreciation.

I have, &c.,

J. TAVERNIER, O.M.I.,
Principal.

BRITISH COLUMBIA,
SQUAMISH MISSION BOARDING SCHOOL,
VANCOUVER, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—The Squamish Mission boarding school is situated on the north shore of Burrard inlet, immediately opposite the city of Vancouver, and about four miles distant therefrom.

Land.—The area of land connected with the school is twenty-one acres, and is held by me in trust for the Sisters of our Order. Besides the garden planted with all kinds of vegetables, the boys under the direction of Mr. Nelson Ladouceur, our foreman, cleared up last spring a nice field in which we grow potatoes, carrots, turnips, &c., for the use of the school.

Buildings.—The main structure consists of : entrance hall, parlour, girls' school-room, two dining-rooms, one for the pupils, the other for the officers ; boys' school-room, kitchen, store-room, all of which are on the ground floor ; the second story is occupied by dormitories for boys and girls, sleeping-rooms for the principal and staff, also a small chapel. The outbuildings consist of : wood-shed, 35 x 16 feet ; laundry, 40 x 20 feet ; and stables, 30 x 20 feet.

Accommodation.—The number of pupils authorized by the department is fifty, but the building being too small, we can accommodate thirty-five only.

Girls' Industrial Work.—The girls have been taught all kinds of housework, also knitting, mending, darning, embroidery, crochet-work, real lace, and flower-making.

Class-room Work.—This consists of reading, spelling, writing, dictation, geography, object lessons and vocal music. The school hours for boys and girls are from 8.30 to 11.30 a.m., and from 4 to 5 p.m. At the end of the fiscal year the pupils were graded as follows :—

Standard I.	18
" II.	8
" III.	2
	28

English is the only language used at all times by the pupils.

Moral and Religious Training.—Religious instruction is daily given to the pupils from 5 to 5.30 every morning, and every night they have prayers in common, and on Sundays and holy days they attend religious service in the parish church. The conduct of all the pupils has been satisfactory during the whole course of the year.

Health and Sanitary Condition.—The health of the pupils has been very good ; the sanitary conditions and drainage are excellent.

Water Supply.—Our water-supply is good ; it is obtained from a small creek a short distance from the school.

Fire Protection.—Besides two Stempel fire-extinguishers, the department has supplied the school with two dozen buckets and two hundred feet of hose, all of which are kept in readiness for use.

Heating.—The house is heated by wood stoves.

Recreation.—The boys' principal recreations are football and baseball ; during the summer season they have swimming and boating ; the girls play dominoes, lotto and chess ; they also enjoy themselves with skipping-ropes, drawing on slates and dressing dolls. During the course of the year the pupils gave many entertainments. Several of these were given to the public, both white and Indian people being present.

General Remarks.—In conclusion, I acknowledge with pleasure and gratitude the interest in our work evinced by Mr. A. W. Vowell, Indian Superintendent, and Mr. Frank Devlin, our good agent, who visited the school several times, examined the pupils, and seemed pleased with the progress made by them.

I have, &c.,

SISTER MARY AMY,
Principal.

BRITISH COLUMBIA,
YALE (ALL HALLOWS) BOARDING SCHOOL,
YALE, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit herewith my annual report for the year ended June 30, 1901.

Location.—This school is situated about a quarter of a mile from the Canadian Pacific railway station of Yale. It stands on the right bank of the Fraser river, about a mile below the mouth of the famous Fraser canyon. This school is not built upon a reserve.

Land.—The school buildings stand in prettily laid-out grounds of about four acres in extent. This land was bought by friends of the school, aided by a government grant of $500, and is held in trust. The property is bounded on one side by a narrow ravine, through which rushes a rapid mountain stream ; in front, below a high bank, flows the Fraser river, only separated from the school land by the Canadian Pacific railway line and the government road ; at the rear of the buildings a high spur of the Cascade mountains rises abruptly, giving an air of picturesqueness and rugged beauty to the whole place.

Buildings.—These consist of a large school building, a small school chapel, a building formerly used as an extra dormitory, now utilised for a clothing department, and a house for visitors and teachers.

The New England Company having given a grant of £350 (three hundred and fifty pounds) for additions and improvements, it is hoped to build an extra wing for this school during the coming year. An addition has already been made to the main building, which adds greatly to the appearance and comfort of the house, namely, the erection of a large covered porch, and new front door, with a long balcony overhead, which is approached by glass doors and steps from the rooms above. This provides a safe and sunny place for recreation for invalids, or for those in poor health when the ground may be wet under-foot. An excellent laundry stove has also been bought, to which has been attached a forty-gallon boiler, contributing much to the convenience of the laundry arrangements.

Accommodation.—Accommodation is provided for twenty-eight pupils and for six teachers. More beds could easily be filled, but experience has proved that Indian children are very apt to show signs of scrofulous tendencies if at all crowded in the sleeping apartments.

Attendance.—All the children are boarders and attend regularly.

Class-room Work.—This is carried on by two Sisters, an English teacher and the matron who takes the needlework classes. The elder girls are encouraged to take classes among the younger ones, in order to develop their powers of passing on to others the benefits of the education they have received. From more than one quarter pleasing testimony has been afforded as to the success of former pupils in carrying on this work after they have returned to their own people.

The usual subjects, as recommended by the code, are taught throughout the school. Regular musical drill is having a marked influence on the bearing of the children, and, by the development and expansion of the chest is greatly minimising the inherited tendency to lung trouble.

Class singing has also proved to be most beneficial in this respect, besides cultivating voices of unusual sweetness. Though in some cases spelling always remains an almost insuperable difficulty, yet, when once the intricacies of writing are mastered, many of the Indian children take delight is using this means of expressing their thoughts, which are often very poetic ; one composition may be given as an illustration :—

'About Music.—There is music in everything but of different kinds. God loves music, so there is always music and singing in heaven. There is music on earth too but the music in heaven is the best and much more pretty. We have a pretty kind of music in us when we dance and sing and play. God made everything, and He gave power to the birds to have music, and to the brook and to the wind too. If you stand near the telegraph wires when the wind is blowing you will hear lovely music. Some birds have hardly any music. The pretty birds cannot have a nice music because they have something pretty already, and the birds that are plain have a lovely music in their throats because they have only dull feathers to cover them, they are not pretty outside.

Some people can make nice music with their hands, they play good, but they have to keep their hands straight and sit up straight too. We have the best music in chapel always, and sometimes I think, when we go to heaven, we will be able to sing good, because we learnt to sing in chapel first.

Little birds sit on trees and sing their music, only one bird flies and sings too, it goes very high but I never could see it. Sometimes the wind only blows a little and then the wind-music is soft, and sometimes it blows hard and then the music is very loud. The thunder makes the loudest music. The river flows fast, there is a lot of water in the river and its music is nearly always loud. The sea makes the grandest music. There is music in everything. Some one told me there was music too when everything was quite still, you could not *hear* that kind of music, but you could feel it in your heart, all the good people loves the music.

EMMA CHUTATLEM, Indian School.
(Aged twelve years.)

Farm and Garden.—About half an acre is, at present, devoted solely to the cultivation of fruit and vegetables, while flower beds are laid out nearer the buildings.

The fruit grown in the school garden has attracted considerable notice. Two first prizes and a second prize for fruit and flowers have been taken at provincial exhibitions in New Westminster.

Industries Taught.—Housework is most carefully and systematically taught in all its branches, including laundry work and bread-making. Marked success has been attained in this department, and there are very many more applications for Indian girls from All Hallows' boarding school to fill places as domestic servants than can possibly be considered. Last year seven ladies, unable to obtain permanent domestic help from us, applied for girls to take 'holiday places' with them. Three were able to avail themselves of this opportunity of having a pleasant healthful change, and of gaining a little insight into the life and manners of a large town. They all won high commendation from their employers.

A few of the elder girls are being taught lace-making, and have already been able to earn small sums by this industry.

As occasion offers, some of the children are encouraged in learning horticultural methods ; as a rule, this is a very favourite occupation, but it cannot be carried on with regularity owing to the great uncertainty of the climate.

Moral and Religious Training.—The Indian nature, especially among the more peacefully inclined and somewhat indolent people of the southern portion of British Columbia, is often so peculiarly susceptible to religious influences that those inexperienced in mission work are apt to take a great deal too much for granted in dealing with them.

Many people urge a shorter period of education and training as being more profitable both to the church and to the state by enabling greater numbers to pass through the schools ; but seventeen years' experience has proved the great unwisdom of this advice. The All Hallows boarding school is called upon to deal with what is practically the first generation of Christian, civilized Indians in this part of the country. Failure and success in dealing with Indian girls have alike shown the special need there is for an unusually long period of most careful moral and religious training, in order that their characters may be sufficiently strengthened successfully to withstand the many adverse influences to which they are exposed on leaving school.

It has been proved in many cases that, unless they can become active workers for good when amongst their own people, their characters rapidly deteriorate, the years of education they have had are practically wasted, and the causes of religion and civilization are brought into disrepute. In this school religious instruction is imparted almost daily, and religious motives are instilled into the children's minds as being the only right principles of action. Their moral training receives equal care and attention.

Health and Sanitary Condition.—The health of the school has been very good during the past year. There were no serious cases of illness, though during the spring a few children suffered slightly from the prevailing epidemic of influenza. Two or three children have been absent for a time on sick leave, granted by the department, one for eye trouble, another from an accident to her arm, but these, though absent from the school, still remained under the supervision of the Sister Superior.

The sanitary condition of the buildings is very good ; the drainage having been thoroughly inspected and repaired during the past year.

Water Supply.—There is a plentiful supply of excellent water afforded by a mountain stream close to the house. The water is received in a capacious cistern, enclosed in a stone tank-house, whence it is distributed throughout both houses by means of iron pipes, while the overflow runs into a flume and is used for irrigating purposes in the vegetable garden.

Fire Protection.—Four Star fire-extinguishers are always at hand. Protection from fire is also afforded by an almost unlimited water-supply ; water is laid on in both stories of the main buildings ; about one hundred and fifty feet of garden hose is in constant use, and can be utilized for fire in case of necessity.

There are four ladders on the premises. A large, low window in the children's dormitory opens on to the low sloping roof of a wood-shed ; although kept securely fastened, yet a few blows with the fire-axe (which is kept in the passage close at hand, by the vice-principal's door) would be sufficient to permit safe and easy escape for all the children sleeping in the dormitory, should the stair-case be cut off.

One axe and thirty-six fire-buckets are kept ready for use. A certain number of the buckets are filled with water every night.

The children are resourceful, obedient, and well disciplined, and have already more than once given acceptable assistance at fires in the neighbourhood.

Careful watch is kept for fires ignited by passing trains in hot weather, and these are promptly extinguished.

As a further protection from mountain fires a belt of land is kept cleared behind the buildings.

Heating and Lighting.—The buildings are heated throughout by wood and coal stoves, the pipes passing, in every instance, through brick chimneys. Coal oil lamps and candles are used for lighting purposes. As a rule, the apartments frequented by the children are only lighted by lamps suspended from the ceiling, or attached by brackets to the wall.

Recreation.—An hour's walk is taken daily (in suitable weather) by the girls under the supervision of a Sister. When lessons and work permit, and during the intervals specially set apart for recreation, a spacious play-ground, containing a

swing, a summer-house, and a long row of small gardens, is in constant use, unless the weather be very inclement, when games, needlework or reading are resorted to in the large play-room indoors.

General Remarks.—It is with great satisfaction that the school now numbers among its inmates three little daughters of former pupils. The last arrival was Tuchsia, whose mother came to school too late in life to distinguish herself by her English spelling, and yet remained long enough to appreciate dimly the infinite value of goodness, as will be seen by the pathetic little letter commending her child to the guardianship of her old school. 'I sent my little girl to you, pecause I am dying. Dake care of her, make her to pe goot.'

The prize-giving was held in June this year. The bishop of the diocese, though unable to be present in person, delegated authority to Archdeacon Pentreath to present the prizes in his name.

The large school-room was crowded on that occasion, the audience enthusiastically applauding every item on the programme. Visitors from a distance, who had no idea of what an Indian school was like, were astonished and delighted at the children's attainments, and at the order and discipline manifested throughout.

Prizes were afterwards distributed. These were not only for school-room work, but included such subjects as needlework, housework, laundry-work, bread-making, and early rising, besides a beautiful silver medal for good conduct.

Archdeacon Pentreath presented a gold medal for religious knowledge.

The school was visited during the year once by the Superintendent of Indian Affairs for the province of British Columbia, and three times by Mr. Frank Devlin, Indian agent.

I have, &c.,

AMY, SISTER SUPERIOR, *C. A. H.*
Principal.

BRITISH COLUMBIA,
ALERT BAY INDUSTRIAL SCHOOL,
ALERT BAY, July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward the annual report of the Alert Bay industrial school, together with an inventory of government property under my charge for the fiscal year ended June 30, 1901.

Location.—The Alert Bay industrial school is healthily situated on rising ground, at the west end of Alert bay, and commands a very pleasant view seaward, and is also sheltered from northerly winds. The industrial school is situated on the Alert bay industrial school reserve. The post office address is Alert Bay, British Columbia.

Land.—There are four hundred and ten acres of land connected with the school. The soil is mostly gravel and is thickly covered with bush. It is best adapted for pasture land, if cleared, and sown with grass.

Buildings.—The school building is of wood, 60 x 40 feet, strongly and tastefully erected with plastered walls, and light, airy, lofty rooms. Attached to the main building is a wing, 54 x 18 feet, comprising workshop and play-room. The outer buildings are : laundry, cow-shed, root-house, hen-house and run, a large wood-shed, 60 x 30 feet, erected by the pupils, and a cottage for the use of the trades instructor, a few yards from the school.

Accommodation.—There is ample room for twenty-five pupils, principal, matron and one teacher. A large loft in the top of the building could easily be converted into another comfortable bed-room or smaller bed-rooms.

Attendenace.—The number of pupils on the roll is twenty-six boys and ten girls.

Class-room Work.—The work done in the class-room has been both satisfactory and encouraging. The boys and girls are taught in separate buildings ; the girls are admirably taught at the village school by Mrs. Hall.

The pupils are graded as follows :—

	Pupils.
Standard I.	6
" II.	10
" III.	10
" IV.	6
" V.	4
	36

Conduct.—The conduct of the pupils was satisfactory.

Farm and Garden.—The flower garden, 56 x 54 feet, has been attended to by the boys, and on the other side of the building a piece was allotted to each boy, seeds were given to each, and most of the boys have taken an interest in their own plot.

In the vegetable garden the potato crop has been good, considering the poor soil, and the vegetables generally have been good. A few pounds of currants were yielded from the bushes.

Water Supply.—The water is supplied to the house from a well near by. The water is pumped up daily by the boys into a large tank, which is frequently cleaned out.

Fire Protection.—Four chemical fire-extinguishers, fireman's axes and fire-buckets are constantly kept in places of convenient access. A fire-hose, one hundred feet long, is kept ready for use. Fire-drill is practised in accordance with the instructions of the department.

Heating.—The heating is all done by means of ordinary box stoves. Chimneys and flues are kept clean.

Lighting.—Ordinary hanging coal oil lamps are used.

Recreation.—The pupils have Saturday afternoon for play and from two to three hours daily. The boys play football a great deal, as they are fond of the game. They constantly have sports, such as running, swimming, boating and jumping. Indoors they play chess, draughts and parlour croquet. The small boys are kept well supplied with picture-books and toys. The girls have dolls, crokinole, books and pictures.

Industrial Work.—All the pupils help in the general housework and washing, and have taken pride doing their work well.

Carpenter-shop.—In the carpenter-shop ten boys have received regular instruction, they have also had instruction in house-building. They have been taught painting, and the Indian agent's house has been thoroughly painted and papered by them.

Religious Training.—The pupils attend morning and evening prayers in the dining-room, and a Bible lesson is given daily to each class. They also attend divine service on Sunday, both morning and evening, and Sunday school in the afternoon. They attend a Friday evening service, and on Saturday the elder pupils attend a prayer meeting. The pupils are continually taught the necessity and advantage of cleanliness and purity of mind and body.

Health and Sanitary Condition.—The health of the pupils has been very good. The sanitary arrangements are satisfactory. A good drain carries away the water from

the kitchen, bath-room, lavatory and wash-house to the sea. Floors are regularly scrubbed and disinfectants used. The ventilation is properly attended to.

Remarks.—Miss Carleton, the matron of the girls' department, is away on furlough and her place is admirably filled by Miss Loxton Edwards. Mr. Halliday, the trades' instructor, has been a great help teaching the boys in Sunday school.

Indian Agent Pidcock has made his usual visits to the institutions, for which my thanks are due.

I have, &c.,

A. W. CORKER,

Principal.

BRITISH COLUMBIA,
COQUALEETZA INDUSTRIAL INSTITUTE,
CHILLIWACK, SARDIS P. O., July 9, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my annual report for the year ended June 30, 1901.

Location.—Our institute is not located on a reserve, but is situated on the south side of the Fraser river, in the best part of the Chilliwack valley, famed as the garden of British Columbia, three miles from the town of Chilliwack, which is reached by regular steamer service from New Westminster, or by Canadian Pacific daily trains to Harrison station, thence to Chilliwack by small steamer and stage.

Land.—The land occupied by the institute is owned by the missionary society of the Methodist Church, and amounts to about ninety acres. Of this, about twenty acres are under pasture and the remainder under crop. The soil is of the finest quality, and is equally well adapted for hay, grain and root crops. The Lucucuck river runs through it, affording an abundance of excellent water for man and beast. Our land comprises part of lots thirty-eight and two hundred and seventy-nine, group two, in the district of New Westminster, and lies within the bounds of the municipality of Chilliwack.

Buildings.—These are as follows :—

(1.) The main building, three story, brick, contains school-room of the senior department, dining-rooms, boys' and girls' dormitories, rooms for staff, and for principal's family, sewing-room, laundry, kitchen, pantries, lavatories, and play-rooms.

(2.) Kindergarten building, where also the band instruments are kept, and where the band has its practices and receives its instruction.

(3.) A frame one-story cottage, occupied by the farm instructor and family.

(4.) A frame building containing in its different parts, shoe-shop, carpenter's shop, wood-shed, a brick-lined root-cellar, flour-room, and drying-room.

(5.) Two large barns.

(6.) A granary.

(7.) A wagon and implement-shed.

(8.) Other minor biuldings are : two tank-houses with capacious tanks, one for rain-water for use in the laundry, the other containing water for domestic use ; a hen-house, a bake-house and a pig-pen.

Accommodation.—The building is planned for the accommodation of one hundred pupils, and has eight rooms occupied by members of the staff, besides five rooms for the use of the principal and his family.

Attendance.—One hundred and fifteen pupils have been in attendance for a longer or shorter period during the year ; the average has been eighty-eight plus ; thirty-two were admitted, twenty-three discharged, and one died. Present attendance, ninety-one, of whom fifty-six are boys and thirty-five are girls.

Class-room Work.—Notwithstanding that over one-third of these now present are new pupils, having been admitted during the year, the progress of the children in their studies has afforded us much gratification. We have never known pupils more anxious to learn ; hence their progress has been rather remarkable. Grading is as follows :

	Pupils.
Standard I.	25
" II.	9
" III.	29
" IV.	23
" V.	7
" VI.	22
	115

Eight of the girls, who evince special aptitude for it, have received lessons in music during the year. Three of these have made such progress as to be able to preside at the organ in religious services. Several of the boys and girls also receive special training in singing. In connection with the Sabbath evening service, held in the institute every Lord's Day, the boys and girls to the number of seventeen, assisted by several of the lady teachers, form a choir, whose rendering of sacred music is much appreciated by the large number of people of the neighbourhood who attend regularly upon this service.

During the sessions of a provincial convention of the Women's Christian Temperance Union held in Chilliwack last September, our institute gave an 'at home,' so that the delegates in attendance from all parts of the province, and interested in all kinds of Christian work as they are, might see and judge for themselves as to the work for the benefit of the Indian race which we are engaged in carrying on. Our children's work in all lines was exhibited, and their proficiency in singing, music, club-swinging and other exercises was, to most visitors, a great and gratifying surprise.

Farm and Garden.—The past season at the beginning gave promise of extraordinary crops ; and the result of the sowing and cultivating would have been most gratifying but for the unfortunate cut-worm plague which wrought such havoc, utterly destroying whole fields of grain and root crops. Pease, potatoes, carrots, turnips, and cabbage, also onions were an almost total loss. Our hay and grain, however, did not suffer. Of hay we had about one hundred and forty tons ; of oats, fifteen tons ; of wheat, five ; and of barley, one and a half tons.

Industries Taught.—All our boys are taught the various kinds of farm work as they are able to engage in it. The smaller boys learn to do the lighter kinds of work and proceed step by step until they are able to drive a team and to do with the handiness born of long practice, and with despatch, all the work of the farm. When this point has been reached they are ready to be discharged, and can find remunerative employment anywhere. Four of the boys are learning shoemaking. Their progress in this is gratifying to their instructor and pleasing to themselves. All the boys as well as the girls learn to do almost all kinds of housework. Several of them acquire much handiness in the use of carpenter's tools, and assist materially in the erection of buildings, which have to be put up from time to time, and in building fences and other improvements as they are needed. Some of the boys show an especial fondness for work in the garden. Special aptitudes we are pleased to note and foster. The

work in which the girls are trained consists of all kinds of housework, beginning with care of rooms and scrubbing, followed by work in the laundry, and proceeding to sewing, knitting, darning, use of the sewing-machine, and fancy work ; also work in the kitchen, such as cooking, baking, butter-making, indeed everything that enters into the ordinary and necessary qualification of successful housekeeping. The success of our boys and girls as prize-winners at our municipal and provincial exhibitions in in proof of what we are doing in the way of imparting instruction along all industrial lines, as well as of the capacity and diligence of the pupils in receiving that instruction.

Moral and Religious Training.—The fruits of this training have become pleasingly evident in many of the pupils who have been longest with us. In this we greatly rejoice. Morning and evening worship is regularly conducted for the whole school ; Sabbath school on Sunday forenoon; attendance at the Indian church in the neighbourhood in the afternoon ; evening service in the institute already referred to ; religious service for the larger children on Tuesday evening of each week and prayer meeting on Thursday evening ; these are the regular means of religious instruction used. They embrace moral training as the only foundation upon which a true and strong moral character can be reared.

Health and Sanitary Condition.—On the whole the health of the pupils has been good. One little girl died from pleurisy, and one of the smallest boys contracted a cold resulting in pneumonia upon which typhoid fever supervened. After a protracted illness of great severity, in which life was almost despaired of, he happily recovered and is now in the very best of health. Although the greatest care is taken to prevent the admission of any but the healthiest children, yet serious illness will occasionally occur, betraying the presence of hereditary taints, and involving great risk to the precious life. Still the care used to maintain the best of health conditions makes it more than probable that the mortality among pupils is not nearly as large as it would be among the same children had they remained at home amid the unsanitary conditions of the reserve and the camp.

Water Supply.—The Lucucuck river, which runs through the institute land and has its rise in the seepage of snow water from the mountains, through a vast substratum of gravel, and issues from the ground about half a mile distant, constitutes the source of our water-supply. This stream is perennial, clear and swift-flowing ; and though impregnated somewhat strongly with iron, is undoubtedly wholesome, and ample to supply a city having a population of many thousands.

Fire Protection.—We regard it as counting for something in point of fire-protection that the material of which our institute (with its household of over one hundred lives) is built, is brick. The windows of the dormitories are provided with fire escapes; barrels of water are kept in the higher halls ; buckets are kept exclusively for use in case of fire where they may be had instantly, and Carr chemical engines and fireman's axes as supplied by the department. During the year a new well has been sunk as an added factor of security in case of fire, supplied with pump and hose attachment ; also a fire-brigade has been organized which is given frequent drills for the purpose of securing efficiency.

Heating and Lighting.—The building is heated with hot air, generated by two furnaces, the Smead-Dowd being the system in use. The fuel used is wood, of which we consume for cooking, laundry and heating, about three hundred cords per annum. We are still dependent upon coal oil for lighting, which we do not regard with entire satisfaction. Gas is not available, nor electricity ; acetylene gas is perhaps the coming light for use in places removed from the great lighting systems of the cities ; we have sought estimates of its cost, and all the information available respecting its use, but do not yet see our way clear to adopt it.

Recreation.—To each child is secured in the arrangements of study and work for the day, ample opportunity for recreation, this being held as important as study and

as necessary as food ; as necessary for health as food and as important for study as books, and wonderful is the capacity which all healthy boys and girls—large and small—have for it. Neither boys nor girls care to occupy themselves with indoor games when the weather admits of their being outside ; and though games of various kinds for indoors and for the long evenings when the days are short, are provided, yet they are indulged in by the few. Indeed most of the pupils are inclined to spend their spare time indoors in reading rather than in games. Hence we seek to provide wholesome light reading for them. Outdoors the game of games is football, of which they never grow weary. Their interest in this game has been heightened by the friendly matches which have been played between the senior institute team and the Chilliwack team, in answer to a challenge by the latter, the result of the two matches played having been to leave the laurels on the heads of our boys, somewhat, it must be confessed, to the chagrin of their opponents. In the monthly letters home which followed the matches, these events formed the staple item of news. The band, and the band only, divides the honours of the recreation hour with football. Their interest in this is also enhanced by the fact that the band is much sought after at the social functions which are given in the country around. During last season, not a garden party was given in the whole surrounding country for which our band was not secured to furnish music.

Remarks.—Several of our pupils who had been for the longest time under training with us, were discharged during the year. We hear good accounts of them, and already some of them have returned to pay a visit to what was so long their home, and is still more home to them than any where else on earth. We are meeting our ex-pupils frequently and are very pleased to learn that so many of them are doing well, and have acquired for themselves a reputation for ability to do well the work in which they are engaged. They earn good wages and enjoy the confidence of their employers.

I have, &c.,

JOSEPH HALL,
Principal.

BRITISH COLUMBIA,
KAMLOOPS INDUSTRIAL SCHOOL,
KAMLOOPS, July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report for the year ended June 30, 1901.

Location.—The Kamloops industrial school is situated at the foot of St. Paul's mountain, on the northern bank of the South Thompson river. It is in the immediate vicinity of the Kamloops reserve, and about two miles from the town of Kamloops, which is a divisional point of the Canadian Pacific railway. The background of bordering hills, and the fine groves lining both banks of the river make the position of the school very pleasant in the spring and summer.

Land.—The area of land belonging to the school comprises three hundred and twenty acres surrendered by the Kamloops Indians for the purposes of the industrial school. Of this land, about fifteen acres are under cultivation in fields, garden and orchard ; the remainder, consisting of sandy hills and broken land, is only fit for grazing. There is no natural grass to be cut for hay, nor timber available for fuel.

Buildings.—The main building contains on the ground floor the parlour, office, dining-room, kitchen and the laundry, with four bath-rooms and bake-oven. The second story is taken up by a dormitory for girls, the girls' class-room and the chapel. To the right is the girls' house, containing sewing and recreation-room, dormitory and bed-rooms for the Sisters. To the north, about one hundred feet from the main building is the boys' home, which contains store-rooms, recreation-rooms, the dormitory and class-room ; and also two bed-rooms for the officers. The outbuildings consist of the carpenter and shoe-shops, two stables and barn, the cellar, the ice-house, the three-roomed cottage for officers, the girls' summer-house, the windmill tower and the tank-tower.

All those buildings are kept in good condition, but the kitchen floor needs to be renovated, and part of the main buildings should be repainted. A new hen-house, 10 x 12 feet, with yard inclosed by chicken-netting, was built in the early spring. The addition to the girls' house, which consists of a large recreation-room and a dormitory, 34 x 22 feet, is still in an unfinished state, but will soon be ready for occupation.

Accommodation.—The school can easily accommodate sixty pupils and seven officers.

Attendance.—At the end of the year twenty-seven boys and twenty-seven girls were in attendance, but owing to the unavoidable absence of some pupils during the year, the average attendance was about fifty. Three boys were regularly discharged by the department, and eight new pupils were admitted.

Class-room Work.—The school hours for the boys were in the morning, from a quarter to nine till twelve o'clock, every week-day, except Saturday ; and in the afternoon of every week-day, from a quarter to five till a quarter past six. The teacher is very efficient and painstaking, and deserves to be congratulated on the progress made by the pupils.

The girls, under the kind management of Sister M. Paula, have also made gratifying progress ; they attended school from two to five in the afternoon, and had half an hour's study in the evening. The programme of studies, prepared by the department, is followed as closely as possible.

At the end of the year the pupils were graded as follows :—

	Pupils.
Standard I.	7
" II.	1
" III.	15
" IV.	8
" V.	16
" VI.	7
	54

Farm and Garden.—The drawbacks to successful farming and gardening here are the scarcity of good land, the difficulty of getting water for irrigation and the periodical overflows of the Thompson river. The garden, now containing four acres, is protected by a substantial dike, which serves also as a wagon road. The product, last year, was sufficient for the needs of the institution, but this year the crops will be very light. There was very little snow during the winter, and no rain at all in the spring. The ground was so dry at the seed-time that most of the seeds failed to germinate. The windmill, which supplies some of the water required for irrigation, was blown down in a storm, and it took time to purchase and erect a new one. A 'Myers' horse-power and 'Low Down' pump combined, was ordered early in the spring for irrigation purposes, but was delayed in transit and could be used only in the latter part of May. It was late in the season before we were able to obtain water from the Indians' irrigation ditch. The extreme drought during the spring was followed by cold weather in June, and the growth has been so slow that probably beans, tomatoes and corn will not

ripen. One-third of the potatoes did not sprout ; carrots, onions and mangolds are almost a total failure. Raspberries are plentiful, and the vines are well fruited. Apple, pear and plum trees, promised well in the spring, but crows devastated the orchard, and there is very little fruit left.

The alfalfa crop is good, as usual, but the rest of the hay crop, consisting of oats and wheat sown for fodder, is a failure.

At the present time our stock consists of four horses, three milch cows, two cows which will calve in the fall, two yearling heifers and three calves.

All the boys, when not engaged in the shops, work in the fields and garden ; they milk the cows and attend to the stable work in turn.

Industries Taught.—*Carpentering.*—Twelve boys have received more or less instruction in this trade ; some have made very good progress. They built the new hen-house, nearly completed the addition to the girls' house, renewed the sewerage drains, enlarged the wood-shed, helped in erecting the new windmill and did considerable work about the tank-tower and horse-power. They were also employed for a few days on the neighbouring reserve in the work of enlarging the church building.

Painting.—Three boys have painted the recreation-room, the school-room, the lavatory and hall, and they have done the work well.

Shoemaking.—As no instructor could be engaged for the shoe-shop, one of the old apprentices was put in charge of it, and under his direction, five boys have learned to repair shoes, and, as a rule, they have done well all the work needed in that line.

Girls' Work.—Under the supervision of the Sisters of St. Ann, the girls do the cooking, baking, washing and learn all the branches of housekeeping. They are taught hand and machine sewing, plain and fancy needlework, crochet-work, and the making of lace and artificial flowers. They have made all their dresses and underwear, and also shirts and drawers for the boys. At the last exhibition held in Kamloops a special prize for the best collection of girls' work was awarded to them, and a rug, made by them, obtained the first prize.

Moral and Religious Training.—The moral training of Indian children is the most important and the most difficult ; it requires a constant teaching of the necessity and advantages of cleanliness and purity of body and mind, of honesty, truthfulness and self-control. But to render the teaching effective, a continuous supervision must be exercised over the children, not indeed to remove from them all the occasions of doing wrong, but rather to train their own will to the faithful discharge of their duties to God and man. The correction, duly administered, of an occasional infraction of the rules of morality, is often more successful in building up the moral character than long exhortations. A system of marking faults committed is carried on, and at least once a day attention is publicly called to these faults ; the wrong-doers are reprehended and, if deemed necessary, punished. The usual mode of punishment is to make the children do some extra work during recreation hours. The most efficacious means to promote the moral conduct of the children is to ground them well in the truths of religion and in the practice of Christian virtue. With this end in view, religious instruction is given daily for half an hour. Morning and evening prayers are said in common. On Sunday, the pupils assemble three times in the chapel ; and one hour is devoted to the singing of sacred hymns and explanation of the gospel.

Health and Sanitary Condition.—I regret to have to record the death of one of our most promising pupils. She died at the school on December 10, after an illness of three weeks, during which she was almost daily visited by Dr. Wade, and devotedly nursed day and night by the Sisters and girls. Her disease was at first pleurisy, but scarcely was she cured of that, when she was attacked by rheumatic fever, which carried her off. Another girl hurt her foot and was incapacitated for three months from following the routine of the school. With these exceptions, the health of the pupils has been excellent, and their healthy appearance is noticed by all the visitors.

The sanitary condition is good. The sewerage drain has been renewed and improved. Ventilation is done by means of the windows and carefully attended to. In the boys' class-room, the lower sash is raised and the space left under it is filled by a piece of board ; the fresh air gets in through the space left between the lower part of the upper sash and the upper part of the lower one. The boys' closets have light plank boxes, which are taken out every week for emptying. Lye, phenyle and chloride of lime are used as disinfectants.

Water Supply.—Water is supplied to the house from a well dug near the river. The pump is operated by horse-power, and the water is kept in a tank, placed near the laundry. The tank is lined inside with galvanized iron and covered all around with saw-dust. Thus the water is kept fresh and pure from all pollution.

Fire Protection.—The fire-appliances on hand are as follows :—

1. Four chemical extinguishers, furnished by the department.

2. Two fireman's axes, also supplied by the department.

3. Three strong ladders permanently attached to the buildings ; three long ladders and a few smaller ones kept in proximity to the buildings, the small ones to be used inside the house in case of necessity.

4. One or two buckets full of water, kept in the rooms wherever a stove is placed. Six fire-buckets in the boys' building, besides a number of others which are also used for other purposes. In the laundry, a dozen buckets or more are always on hand.

5. One water tank near the laundry, of a capacity of eighteen hundred gallons, with two taps, but as there is not sufficient pressure hose cannot be used in connection with them, and the water would have to be carried in buckets. Another tank, of a capacity of about twelve hundred gallons, was erected last year on a tower as high as the highest building. This tank is filled from the well near the river, by means of a force pump. The hose in connection with it, is one and one-quarter inch, and can be attached to any of the three hydrants, placed, one near the boys' building, another near the kitchen and the third at the foot of the tower. The boys are trained in the operating of the fire-hose, and at a moment's notice a stream of water may be directed to any part of the roofs or buildings. But I regret to say that, although the tank seems to be well protected against frost by several layers of tar paper, the water could not be used during the severe weather of last winter ; to prevent such an occurrence, it will be necessary to have a stove placed in the tower.

Heating and Lighting.—Only ordinary box-stoves are used for the purpose of heating, and coal oil is the only means of lighting.

Recreation.—The pupils have half an hour of recreation in the morning, half an hour at noon and from half-past six in the evening till bed-time. The principal outdoor sports are baseball in the summer and skating in the winter. The brass band provides another form of recreation ; one of the pupils is the leader.

The girls indulge in the ordinary amusements, suitable to their sex ; some of them are very fond of reading ; on Sundays and holidays, walks, drives and excursions are in order. But the chief delight of the pupils is to listen to the gramophone.

General Remarks.—I cannot close this report without extending my heartfelt gratitude to Mr. Vowell, Indian Superintendent, for his kindness and the interest he takes in the welfare of this institution. We were delighted to welcome him three times this year. I have much pleasure also, in thanking Mr. Irwin, the Indian agent, for his promptness in giving us assistance whenever it is needed. I would also mention the visit of Rev. Father Lacombe, the great missionary of the Northwest, who was well pleased with the healthy appearance of the children.

I have, &c.,

ALPH. M. CARION,
Principal.

BRITISH COLUMBIA,
KOOTENAY INDUSTRIAL SCHOOL,
ST. EUGENE P. O., July 1, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit my report for the year ended June 30, 1901.

Location.—This school is agreeably situated on St. Mary's reserve, and about five miles from Cranbrook, which is our nearest railway depot.

Land.—The area of land in connection with the school and owned by the department is twenty acres. In addition, we have rented one hundred and twenty acres in order that the children could receive a more thorough training in farming, as this knowledge is considered one of the most essential parts of their education.

Buildings.—There are three buildings occupied by the staff and pupils. These are kept in repair and are in good condition. The main structure consists of entrance hall, office, children's parlour, staff dining-room, kitchen, pantry, girls' school-room, containing five windows, and dormitory for the employees who have no superintendence of the children outside of the regular hours. At the right is situated the girls' home, which is partitioned into recreation and sewing-room, refectory, lavatory and dormitory. This spring the dormitory has been painted, the bedding renewed and many other minor improvements made. Situated at the left of the main building is the boys' home. This, although larger, is on the same plan as the girls' home, with the exception that the school-room adjoins the recreation-room, and the dormitory is in two sections; one for the large boys, with the foreman, the other for the small boys, with a superintendent. The surrounding buildings, which add to the beauty of the place, are systematically distributed to facilitate the works or trades of the different departments. They are as follows : on the girls' side—laundry, bakery and supply-store. Back of the main building are the dairy and ice-house, with adjoining meat-house, also the foreman's house. On the boys' side are the shoe-shop, carpenter-shop, implement-shed, barns, stables and other like buildings.

Accommodation.—Accommodation can be provided for sixty children and ten members of the staff.

Attendance.—The average attendance during the year was fifty-four.

Class-room Work.—The half-day system is in force, the school hours being, for the boys, from 8.15 a.m. to 11.15 a.m., and for the girls, from 1 p.m. to 4 p.m. Great pains are taken to explain the lessons to the pupils and particular attention is given that they utilize well their time in school. On the whole the progress has been very satisfactory. The programme of studies authorized by the department is adhered to. The pupils are graded as follows :—

	Pupils.
Standard I.	8
" II.	8
" III.	15
" IV.	10
" V.	10
" VI.	2
	53

Farm and Garden.—The boys receive instructions in farming and gardening, working each day under the supervision of the foreman. Two gardens are planted with fruit trees, gooseberry and currant bushes, and in one of these various vegetables such as carrots, onions, turnips, cabbages, beets and parsnips are grown. The fruit trees are not yet old enough to bear except in the smaller garden where present appearances indicate an abundance of fruit. The crop of oats is very promising and the plentiful rains have saved a great deal of labour.

Industries Taught.—The work for the boys consists chiefly in gardening, farming, clearing land and sawing and splitting wood.

Carpentering.—Carpentering this year, consisted in the repairing of premises, the building of fences, and the making of some useful furniture.

Shoemaking.—Our shoemakers were kept at work mending shoes and harness, which they did very creditably.

Girls' Industrial Work.—The girls learn to mend clothes and darn, also dressmaking and fancy work. In household work they receive daily instruction, and learn to cook, bake, house-clean and do laundry and dairy work.

Moral and Religious Training.—This is carefully attended to in every respect by those concerned in the children's welfare. Half an hour is daily devoted to the explaining of Christian doctrine, besides many short instructions are given to inculcate in them the principles of honesty and morality.

Health and Sanitary Condition.—The health of the children, on the whole, has been good, and no sickness of a serious nature made its appearance among them during the year. Underground drains carry off the water from the kitchen and laundry, and disinfectants are used wherever necessary. The ventilation is good and the premises are kept clean.

Water Supply.—An ample supply of water is obtained from two wells, one in the kitchen-yard and the other in the boys' play-ground. For irrigation, the water is obtained from a mountain stream, from whence it is conveyed in trenches to the gardens and fields.

Fire Protection.—All fire-appliances are in good order. Three Carr, glass-lined, fire-extinguishers are placed in convenient places ; there are two fireman's axes, three ladders, two hose and twelve fire-pails constantly in readiness. The pupils are exercised weekly in the fire-drill.

Heating.—Our houses are heated entirely by wood stoves.

Recreation.—The boys have a variety of games, such as football, baseball, marble-playing, swimming, fishing and horse-back riding in summer ; coasting, skating and indoor games during winter. The brass band still continues for them a favourite amusement. Five small boys have been added to it and are doing nicely. This year the band boys furnished the music for the Victoria day celebrations at Cranbrook. They were favourably commented on for their excellent music as well as for their gentlemanly behaviour. The girls in their own yard amuse themselves with croquet, the skipping-rope and like games. They while away the winter evenings with checkers, dominoes, story-books, music and singing.

General Remarks.—In conclusion, I wish to mention my grateful appreciation of the interest taken in our work by Mr. A. W. Vowell, Indian Superintendent, who, in correspondence with the children contributed much to their advancement by his words of wholesome advice. I beg also to tender my thanks to our worthy agent, Mr. Galbraith, who, in his regular official visits, examined the children in their different studies, and rendered valuable assistance by his kind encouragement and continued interest in our school.

I have, &c.,

N. COCCOLA,

Principal.

British Columbia,
Kuper Island Industrial School,
Kuper Island P. O., July 15, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

Sir,—I have the honour to submit my annual report for the fiscal year ended June 30, 1901.

Location.—This school is in Telegraph bay, on Kuper island, situated about five miles from the milling town of Chemainus, on the Esquimalt and Nanaimo railway. The location of the school is very pleasant, the surroundings and scenery being most attractive.

Land.—The land used by the institution forms part of the Pennalekut Indian reserve, on Kuper island. For the purposes of the school an area of about seventy acres was surrendered by the Pennalekut Indians. The land is level ; most of the timber has been cut down ; the soil is fair and under cultivation and used partly as pasturage and partly as hay-fields and vegetable garden.

Trees.—A great variety of shade trees ornament the surroundings of the buildings and the play-grounds ; about two hundred fruit trees, though young, give promise of an abundant crop.

Buildings.—All the buildings, which are seventeen in number, are in excellent condition, the boys and girls occupying separate buildings.

1. The main buildings contain on the ground floor, parlour, office, boys' dining-room, kitchen, pantry and girls' dining-room ; on the second floor, girls' school-room, music-hall, chapel and two spare rooms.

2. The girls' home is used for a sewing-room, infirmary for girls, store-room, recreation and sitting-room on the first floor, and for dormitories, linen and bath-rooms with rooms for matron, teacher, cook, and assistant matron on the second floor.

3. The boys' home has on the lower floor the boys' infirmary, the store-room for provisions and clothing, the band and teacher's room, the lavatory, the boys' play-hall and school-room ; on the upper floor, dormitory, linen-room, also bed-rooms for principal, foreman and shoemaker.

The outbuildings are as follows :—

4. Bakery, with modern brick oven.
5. Wood-shed for bakery and laundry.
6. Laundry, with three furnaces and boilers.
7. Dairy, with modern improvements.
8. Wood-shed for kitchen and house, with tool and oil compartments.
9. Boat-house, to shelter four boats.
10. Gymnasium ; this building is also used for concerts and entertainments.
11. Carpenter and shoemaker-shops.
12. Lumber shed.
13. Stables, pig-sty and hen-house.
14. Barn and implement-shed.

The following new buildings were erected since my last report :—

15. Drying-house, 30 x 20 feet.
16. Addition to barn, 54 x 20 feet, with a lean-to.
17. Water-tank, 10 x 10 feet, and 7 feet high. Also three water-closets and bath-room for officers, size, 10 x 5 feet, 7 x 5 feet, and 11 x 5 feet.

Accommodation.—There is room to accommodate at the school seventy-five pupils and eight officers.

Attendance.—The average attendance during the year was a fraction over sixty.

Class-room Work.—The school hours for the boys were, in the morning, from 9 till 12 noon, and in the afternoon, from 1.30 till 3, with an hour's study in the evening, from 7.30 till 8.30. The boys who are learning a trade work half a day at their respective trades and have half a day at school. The girls have school in the morning from 9 to 12 noon, with one hour's study in the evening. The afternoon is spent in the sewing-room. The boys and the girls have separate class-rooms with a teacher for each school. The progress made in the school-rooms was satisfactory.

At the end of the year the pupils were graded as follows :—

	Pupils.
Standard I.	8
" II.	3
" III.	16
" IV.	12
" V.	16
" VI.	6
	61

A total number of pupils of sixty-one, consisting of thirty-six boys and twenty-five girls.

Farm and Garden.—All the senior male pupils are taught farming and gardening, whilst the younger boys take care of the flower garden. Our vegetable crop, which was very promising last year, was greatly damaged by the cut-worms which infested British Columbia and the adjacent states. This year we have about five acres planted with potatoes and other vegetables.

Live Stock.—Our stock consists at the present time of one yoke of oxen, nine milch cows, one bull, five yearlings, nine young calves, nine pigs, and a large flock of poultry.

Industries Taught.—*Carpentry.*—Six apprentices assisted the foreman in building a new drying-house, an addition to the barn and new water-closet ; they also made the necessary repairs to the other buildings.

Shoemaking.—The pupils who learn this trade take a deep interest in their work ; their instructor is well pleased with their progress. All the shoes used at the school are made in the shop, and all repairing is attended to by the apprentices.

Painting.—Two boys have painted all the new buildings and partly repainted the interior of our old buildings, in a very creditable manner.

Baking.—The senior pupils, under the direction of the cook, supply the institution with excellent bread.

Girls' Industrial Work.—The girls were very neat and clean, and did the housework with commendable interest. They were taught the art of cutting and fitting dresses, mending, darning and knitting ; also hand and machine sewing. They made various kinds of fancy work, which was greatly admired by visitors ; they manufactured all their own dresses as well as the underwear and the duck coats for the boys.

Besides these industrial branches, the older pupils have been instructed in laundry work, in milking and butter-making.

Moral and Religious Training.—The pupils at all times were under the constant vigilance of some member of the staff. Great pains were taken to inculcate the highest standard of morality. Religious instruction was imparted daily from 5 till 5.30 p.m., and morning and evening prayers were said in common.

Health and Sanitary Condition.—I regret to have to report that during the year one pupil died at the school and three died at home, where they had been for a long

time on sick leave. We were also visited by an epidemic of mumps from which almost every pupil suffered, and we had two cases of pleurisy and two of pneumonia, which were successfully treated at the school. The sanitary condition, thanks to the liberal assistance of the department, is now all that could be desired. The automatic flushing water-closets together with the sewerage system of vitrified pipes carry off all the refuse from laundry, kitchen and closets to the sea, below low-water mark. No garbage is allowed to remain on the premises and all rooms are thoroughly ventilated.

Water Supply.—A creek, supplied from natural springs, in close proximity to the buildings, furnishes a constant flow of pure, fresh water. By means of an hydraulic ram this water is forced into the new water-tank and thence is conveyed throughout all the buildings.

Fire Protection.—Every fortnight the pupils were drilled in the use of our fire-extinguishers, which consist of three Star chemical fire-engines, twenty fire-buckets, one hundred feet of fire-hose, two fire-axes, fire-ladders are on the roofs of all buildings, and ladders handy to every building. There are also stand-pipes in close proximity to all the principal buildings to which the fire-hose can readily be attached. In all the principal apartments there are water-taps with which the fire-hose can speedily be connected.

Heating and Lighting.—Ordinary box-stoves alone are in use for heating purposes, whilst coal oil lamps supply the needed light.

Recreation.—The principal outdoor amusements for the boys are baseball, football, swimming and boating, during the summer. The indoor games consist of checkers, chess, lotto and dominoes. They enjoy very much their practices with the band. This summer our band boys were again invited by the committee of the 24th of May celebration to play in the city of Victoria, and I am glad to say gave great satisfaction. The girls amuse themselves by swinging, skipping and playing hand-ball, whilst they enjoy the same indoor games as the boys.

General Remarks.—We sustained a great loss by the sudden death of our foreman, Mr. D. Gallant, who accidentally fell from the new water-tank and was instantly killed.

In closing this report, I wish to express my sincere thanks to Mr. A. W. Vowell, Indan Superintendent, and to Mr. W· R. Robertson, our Indian agent, for their unremitting attention and kindness on behalf of our school.

I have, &c.,

G. DONCKELE,
Principal.

BRITISH COLUMBIA,
METLAKAHTLA INDUSTRIAL SCHOOL,
METLAKAHTLA, August 31, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit this report for the year ended June 30, 1901.

Location.—This school is situated in the village of Metlakahtla on the western side of the Tsimpsean peninsula. It commands a pleasant and extensive view of land and sea.

Buildings and Accommodation.—The buildings with their divisions and dimensions are as under :—

Boys' Division.—1. The main building, a two story frame structure. It has a frontage of 90 and a depth of 60 feet. The accommodation is sufficient for about thirty pupils and necessary staff.

2. A comfortable school-house, 42 x 25 feet, in which class-instruction is given.

3. A building, 70 x 22 feet, divided into laundry and bath-room, shoemaker and carpenter's shops and a wood-shed.

4. Blacksmith's shop and coal-house, 24 x 18 feet.

5. Stable, 22 x 10 feet.

6. Poultry-house, 20 x 8 feet.

Girls' Division.—7. A two-story frame building, 54 x 36 feet, with a wing 18 x 18 feet, and a one-story annex, 18 x 16 feet. It contains the rooms occupied by the matron and her assistants, the girls' dormitories, sitting, dining and store-rooms and a kitchen.

Since my last report considerable alterations were made in this building for the better accommodation of the pupils.

8. A meat-house and coal and wood-sheds, 67 x 10 feet.

9. A house, 36 x 18 feet, formerly used as a class-room but lately made into a laundry and store-room.

The buildings in the boys' division are government property. They are kept in good repair.

Gardens and Grounds.—The gardens are planted with gooseberry, currant, blackberry and raspberry bushes, and also the most useful vegetables, and all of these grow well. A few fruit trees have also been planted, but they do not look very promising. I think the climate does not suit the cultivation of large fruit. The appearance of the grounds in front of the school has been improved by fencing, trenching and planting.

Attendance.—The average attendance, until the beginning of March, was about fifty-eight—twenty-six boys and thirty-two girls. After that the attendance was reduced to twenty-five boys and twenty-five girls, the number for which a per capita allowance is made by the department.

Class-room Work.—The boys and girls were taught in buildings separate from each other. The girls were, in the beginning of the year, taught by Miss Northen, afterwards by Miss Edwards and latterly by Miss Jackson. The boys were taught by the principal. The subjects of study and instruction were reading, writing, arithmetic, geography, grammar, composition, history, drawing, singing and religious knowledge.

Fair progress has been made. The standing of pupils on the roll for the last quarter was as follows :—

	Pupils.
Standard I.	1
" II.	7
" III.	16
" IV.	12
" V.	14
" VI.	2
	—
	52
	—

Industrial Work.—Thirteen of the pupils were instructed in carpentry and painting. They were chiefly employed making furniture, remodelling and papering rooms, repairing buildings, erecting fences and painting. All the boys worked occasionally at gardening. The girls received instruction in cooking, laundry, needle and housework.

Moral and Religious Training.—Every opportunity is taken to teach the pupils their moral responsibilities and to persuade them to practise civility, kindness, obedience, truthfulness and honesty. Religious instruction is given daily.

Conduct.—The conduct of the pupils with one or two exceptions was good.

Health and Sanitary Condition.—The drainage is good, and cleanliness is strictly enforced. The health of the boys was very good, there being scarcely any sickness among them, but the girls, I regret to say, were not so fortunate. Two of them died in the school, and another shortly after being discharged to her parents.

Water Supply.—The capacity of the tanks is nearly sufficient for domestic use; but in long continued hard frost, or in a dry summer, the supply of water in them would probably be found very insufficient, should any extensive fire break out.

Fire Protection.—The pupils have regular and frequent practice in the use of the appliances for extinguishing fire. The boys move quickly and handle the buckets and ladders very cleverly. Two or three more tanks and a small force-pump would greatly improve our means of extinguishing a fire. The Indians of this village, aided by contributions from missionaries, the Indian agent, and the employees of this school purchased a very good force-pump, but it is not likely to be of much use until a better supply of water is provided.

Heating.—All the rooms on the lower floors are heated by stoves, but the dormitories are not heated.

Recreation.—The chief outdoor pastimes of the boys are football, baseball and swimming, and indoors, draughts, crokinole and other games. The girls amused themselves with handball, skipping-ropes, &c.

General Remarks.—About the middle of February, Miss R. M. Davies was appointed matron in place of Miss Jackson, who again returned to the teaching of the girls. The Rev. J. H. Keen kindly gave religious instruction in the class-room, once a week. Mr. Todd, Indian agent, visited the school several times during the year.

The Sunday school continues under the kind superintendence of Miss West, assisted by a number of other ladies connected with the Church Missionary Society.

I have, &c.,

JNO. R. SCOTT,
Principal.

BRITISH COLUMBIA,
WILLIAMS LAKE INDUSTRIAL SCHOOL,
150-MILE HOUSE P. O., July 10, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to submit the following report for the year ended June 30, 1901.

Location.—The Williams Lake industrial school is situated on the right bank of the San José river and distant about four miles from Sugar Cane reserve.

Land.—In connection with the school there are about two thousand five hundred acres of land, the property of St. Joseph's mission.

Buildings.—The buildings consist of the girls' school, the boys' school, kitchen and dining-rooms, harness-shop, carpenter-shop and meat-house. During the year a dwelling-house, 60 x 30, for the principal and assistants, as also a new granary, 22 x 30 feet, have been built.

Accommodation.—Accommodation can be provided for eighty to ninety pupils and necessary staff.

Attendance.—The attendance throughout the year has been very regular.

Class-room Work.—Having taken charge of the school only in March, I am not in a position to ascertain the progress made by the pupils since last report. At the end of this fiscal year I find the pupils graded as follows :—

Standard	I.	9
"	II.	10
"	III.	10
"	IV.	11
"	V.	10
		50

Farm and Garden.—Nearly all the boys learn farming, as all our Indians have large farms on their reserves. The girls have their little flower-gardens, of which they take good care.

Industries Taught.—Three boys are constantly employed in the harness-shop and two in the carpenter-shop. Their progress is good. The girls are instructed by the Sisters in everything a good housewife is expected to know : cooking, baking, laundry, needle and housework.

Moral and Religious Training.—This, of course, is attended to continually and by all who are in charge of the children. Both boys and girls receive religious instruction daily.

Health and Sanitary Condition.—The health of the children did not give us much anxiety this year. One boy, who was sick on my arrival, was sent home by the doctor's advice and died there during the month of May. The sanitary condition is satisfactory and is still improving.

Water Supply.—The management of the school has gone to great expense (about $2,500) in order to provide an abundant water-supply. Before winter sets in, water-pipes will have been laid to all the buildings.

Fire Protection.—Besides the water-pipes just mentioned, we have chemical extinguishers and buckets always ready at hand.

Heating and Lighting.—The lighting is by coal oil lamps and the heating by ordinary box-stoves.

Recreation.—Both boys and girls have large play-grounds where they indulge in games suitable to their age and condition.

General Remarks.—All the ex-pupils, with very few exceptions, are doing well ; some are exemplary in every respect. In closing my report, I have much pleasure in thanking Superintendent A. W. Vowell for his kind visit to the school and his words of satisfaction spoken at the time of his official visit. I must also acknowledge the zealous co-operation of Indian Agent E. Bell, and his promptness in giving me all necessary information. Thanks are also due to the members of the staff for their faithful work throughout the year.

I have, &c.,

H. BOENING,
Principal.

(Received too late for publication in proper position.)

NORTHWEST TERRITORIES,
LESSER SLAVE LAKE C. E. BOARDING SCHOOL,
LESSER SLAVE LAKE, October 22, 1901.

The Honourable
The Superintendent General of Indian Affairs,
Ottawa.

SIR,—I have the honour to forward my annual report on the Lessar Slave lake (Church of England) boarding school, for the year ended June 30, 1901.

Location.—The school is situated about a mile south of Buffalo lake, over which it commands a good view, and is distant six miles from Lesser Slave lake proper. The Heart river, which passes within half a mile of the school, joins Buffalo lake with Lesser Slave lake.

The school is not situated on a reserve.

Land.—There is about fifty acres of land in connection with the school, the property of the Church Missionary Society. It consists of bush and prairie land; the soil is a sandy loam and is well adapted for all kinds of agricultural purposes.

Buildings.—The girls' home is 24 x 30 feet. On the ground floor is situated the children's dining-room, matron's sitting-room, and a sitting-room for the teacher and his wife—the latter being boys' matron; the upper floor comprises the girls' dormitory and matron's bed-room. There is an adjoining kitchen, 12 x 15 feet.

Last year a new wing, 32 x 34 feet, was added to the original building; the ground floor of which is occupied as a school-room and boys' day-room, and the upper floor is a boys' dormintory and teachers' bed-room.

The outbuildings consist of a new fish and ice-house combined, 18 x 28 feet, with a storehouse above; a new root-house, 15 x 12 feet; and implement-shed, 18 x 24 feet, also stables and an old storehouse with a bale-room above.

Accommodation.—There is accommodation for fifty pupils and four of a staff.

Attendance.—Not including the day pupils in attendance at the school, we had a daily school average for the December, March and June quarters of thirty-four, thirty-nine and thirty-nine pupils, respectively. There were seventy pupils enrolled.

Class-room Work.—The studies taught at the school were English, reading, writing, arithmetic, geography, general knowledge, ethics, recitation, vocal music, religious instruction and cooking.

Farm and Garden.—The boys assist in all farm and garden work. This year we had about four acres of oats under cultivation, also two acres of potatoes, and a garden with half an acre well stocked with various kinds of vegetables. Milch cows and horses are kept at the school.

Industries Taught.—The boys are taught agriculture.

Health and Sanitary Condition.—The health among the children at the school was good. Two closets, one for boys and one for girls, are situated about thirty yards from the school buildings.

Water Supply.—During the summer, water is obtained from the river by means of a water-cart ; snow is used in winter.

Fire Protection.—This consists of two ladders, one of which is attached to the roof of the kitchen, and the other to the roof of the home.

Heating and Lighting.—The buildings are heated by box-stoves, wood being the fuel used. Coal oil lamps are used for lighting purposes.

Recreation.—This consists of football, baseball and indoor games of various kinds.

I have, &c.,

C. D. WHITE,
Principal.

PART II.

TABULAR STATEMENTS

FINANCIAL STATEMENTS

SHOWING Receipts and Expenditure of the various Boarding and Industrial Schools, for the year ended June 30, 1901.

FORT WILLIAM ORPHANAGE, ONT.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		565 00
From other sources		1,174 76
Contributed by way of clothing		25 00
Total receipts		1,764 76
EXPENDITURE.		
Salaries	107 00	
Food	859 03	
Clothing	212 30	
Fuel and light	63 33	
Equipment and furniture	34 87	
Building and repairs	45 50	
Miscellaneous	574 92	
Total expenditure	1,896 95	
Excess of expenditure over receipts		132 19
	1,896 95	1,896 95

NORWAY HOUSE BOARDING SCHOOL, MAN.

(Methodist).

RECEIPTS.	$ cts.	$ cts.
Government grant		3,665 75
Receipts and sales		56 19
Total receipts		3,721 94
EXPENDITURE.		
Salaries	1,200 00	
Food	1,141 00	
Clothing	952 93	
Equipment	310 10	
Fuel and light	87 44	
Freight	347 72	
Travelling expenses	34 60	
Drugs	2 05	
Paint	110 60	
Total expenditure	4,186 44	
Excess of expenditure over receipts		464 50
	4,186 44	4,186 44

STATEMENT of Receipts and Expenditure for the year ended June 30, 1901—*Con.*

PINE CREEK BOARDING SCHOOL, MAN.

(Roman Catholic).

	$ cts.	$ cts.
RECEIPTS.		
Government grant		3,274 53
EXPENDITURE.		
Salaries	300 00	
Food	1,648 00	
Clothing	1,535 00	
Fuel and light	150 00	
Heating system	2,000 00	
Miscellaneous	175 00	
Total expenditure	5,808 00	
Excess of expenditure over receipts		2,533 47
	5,808 00	5,808 00

PORTAGE LA PRAIRIE BOARDING SCHOOL, MAN.

(Presbyterian).

	$ cts.	$ cts.
RECEIPTS.		
Government grant		1,227 60
Treaty money for pupil		5 00
Cash on hand		22 80
From Northwest Committee		42 12
Total receipts		1,297 52
EXPENDITURE.		
Food	862 57	
Clothing	23 80	
Fuel and light	266 95	
Repairs	10 34	
Equipment	75 07	
Miscellaneous	58 79	
	1,297 52	1,297 52

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

RAT PORTAGE BOARDING SCHOOL, ONT.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		2,155 20
Discount on bills		118 93
Value of clothing donated		198 35
Contributed from other sources		200 00
Total receipts		2,672 48
EXPENDITURE.		
Salaries	565 20	
Provisions	962 38	
Clothing	322 65	
Equipment, including stable expenses	465 71	
Building and repairs	701 07	
Miscellaneous, interest, insurance, etc	184 05	
Total expenditure	3,201 06	
Deficit, June 30, 1901, paid by Mission		528 58
	3,201 06	3,201 06

BIRTLE BOARDING SCHOOL, MAN.

(Presbyterian).

RECEIPTS.	$ cts.	$ cts.
Balance on June 30, 1900		70 35
Government grant		2,639 60
From Church Committee		78 00
Clothing		900 00
Salaries		1,450 00
Total receipts		5,137 95
EXPENDITURE.		
Salaries	1,450 00	
Food	1,481 75	
Clothing	959 50	
Fuel and light	206 90	
Building and repairs	86 44	
Equipment	461 54	
Miscellaneous	358 45	
Total expenditure	5,004 58	
Balance on hand, June 30, 1901	133 37	
	5,137 95	5,137 95

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

BLACKFOOT BOARDING SCHOOLS, N.W.T.

(Church of England).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		2,344 80
Receipts from other sources (the Church, &c.)		1,833 57
Value of clothing, &c., in bales		832 00
Total receipts		5,010 37
EXPENDITURE.		
Balance, July 1, 1900	8 05	
Salaries	1,696 50	
Food	1,350 66	
Clothing	729 06	
Fuel and light	505 55	
Building and repairs	126 51	
Equipment and furnishings	358 63	
Miscellaneous	598 19	
Total expenditure	5,373 15	
Deficit, June 30, 1901		362 78
	5,373 15	5,373 15

BLOOD BOARDING SCHOOL, N.W.T.

(Church of England).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		3,552 00
Receipts from other sources (the Church, &c.)		2,592 17
Value of clothing, &c., in bales		1,300 00
Total receipts		7,444 17
EXPENDITURE.		
Balance, July 1, 1900	452 13	
Salaries	1,872 50	
Food	2,330 07	
Equipment and furnishings	717 02	
Clothing	1,100 96	
Fuel and light	307 85	
Building and repairs	353 23	
Miscellaneous	728 40	
Total expenditure	7,862 16	
Deficit, June 30, 1901		417 99
	7,862 16	7,862 16

STATEMENT of Receipts and Expenditure for the year ended June 30, 1901—*Con.*

BLOOD BOARDING SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		1,274 00
" for water supply		250 00
From other sources		200 00
Total receipts		1,724 00
EXPENDITURE.		
Salaries	250 00	
Food	750 00	
Clothing	100 00	
Fuel and light	300 00	
Building and repairs	350 00	
Equipment	200 00	
Miscellaneous	100 00	
Total expenditure	2,050 00	
Excess of expenditure over receipts		326 00
	2,050 00	2,050 00

BLUE QUILL'S BOARDING SCHOOL, N.W.T.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		3,235 00
From other sources		232 00
Total receipts		3,467 00
EXPENDITURE.		
Salaries	315 00	
Food	1,703 03	
Clothing	627 75	
Fuel and light	451 66	
Equipment	179 49	
Miscellaneous	207 98	
Accounts paid	500 00	
Total expenditure	3,984 91	
Excess of expenditure over receipts		517 91
	3,984 91	3,984 91

STATEMENT of Receipts and Expenditure for the year ended June 30, 1901—*Con.*

CROWFOOT BOARDING SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		1,048 00
From other sources		677 00
Loan		600 00
Proceeds sale of garden produce		200 00
Total receipts		2,525 00
EXPENDITURE.		
Salaries	950 00	
Food	800 00	
Clothing	410 00	
Fuel and light	200 00	
Improvements	85 00	
Labour	25 00	
Miscellaneous	65 00	
Total expenditure	2,535 00	
Excess of expenditure over receipts		10 00
	2,535 00	2,535 00

CROWSTAND BOARDING SCHOOL, N.W.T.

(Presbyterian).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		2,456 80
Church grant		2,059 00
Amount contributed in clothing		625 00
Amount received from other sources		273 34
Total receipts		5,414 14
EXPENDITURE.		
Salaries	2,059 00	
Food	1,629 19	
Clothing	725 27	
Fuel and light	379 23	
Building and repairs	140 98	
Equipment and furniture (no special grant)	133 60	
Extra labour	120 00	
Miscellaneous	223 00	
Balance on hand, June 20, 1901	3 87	
	5,414 14	5,414 14

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

COWESESS' BOARDING SCHOOL, N.W.T.

(Roman Catholic.)

	$ cts.	$ cts.
RECEIPTS.		
Government grant	.....	1,420 80
EXPENDITURE.		
Salaries	408 18	
Food	1,037 19	
Clothing	278 10	
Fuel and light	46 95	
Building and repairs	12 68	
Equipment and furniture	322 80	
Miscellaneous	295 62	
Total expenditure	2,401 52	
Excess of expenditure over receipts	.....	980 72
	2,401 52	2,401 52

DUCK LAKE BOARDING SCHOOL, N.W.T.

(Roman Catholic).

	$ cts.	$ cts.
RECEIPTS.		
Government grant	.....	9,317 73
Paint for buildings	.....	600 00
Other sources	.....	60 00
Total receipts	.....	9,977 73
EXPENDITURE.		
Salaries	2,302 80	
Food	4,789 34	
Clothing	573 20	
Fuel and light	281 40	
Installation of acetylene gas	1,350 00	
Building and repairs	3,420 16	
Equipment and furniture	1,304 22	
Miscellaneous	2,530 11	
Total expenditure	16,551 23	
Excess of expenditure over receipts	.....	6,573 50
	16,551 23	16,551 23

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

EMMANUEL COLLEGE, N.W.T.

(Church of England).

RECEIPTS.	$ cts.	$ cts.
Government grant per capita		3,710 93
" " for repairs		1,000 00
New England Co. grant		242 00
Church Missionary Society grant		960 00
Proceeds sale of cattle and produce		167 56
Donations		88 15
Value of clothing received from Women's Auxiliary		260 00
Other sources		641 41
Total receipts		7,070 05
EXPENDITURE.		
Deficit, July 1, 1900	3,159 20	
Provisions	1,712 67	
Clothing	711 14	
Equipment	830 31	
Repairs	141 55	
Labour	254 95	
Allowance to pupils	261 99	
Fuel and light	380 70	
Salaries	1,043 60	
Miscellaneous	345 09	
Total expenditure	8,841 20	
Excess of expenditure over receipts		1,771 15
	8,841 20	8,841 20

ERMINESKIN'S BOARDING SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Balance on hand, June 30, 1900		42 16
Government grant		2,937 00
From other sources		200 00
Total receipts		3,179 16
EXPENDITURE.		
Salaries	700 00	
Food	1,815 00	
Clothing	505 15	
Fuel and light	115 45	
Total expenditure	3,170 60	
Balance on hand, June 30, 1901	8 56	
	3,179 16	3,179 16

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

FILE HILL'S BOARDING SCHOOL, N.W.T.

(Presbyterian.)

RECEIPTS.	$ cts.	$ cts.
Government grant		1,144 15
From other sources		1,134 94
Value of clothing contributed		250 00
Total receipts		2,529 09
EXPENDITURE.		
Salaries	913 30	
Food, fuel and light	580 23	
Clothing	70 36	
Building and repairs	348 81	
Equipment and furniture	132 60	
Miscellaneous	192 00	
Total expenditure	2,237 30	
Balance on hand, June 30, 1901	291 79	
	2,529 09	2,529 09

GORDON'S BOARDING SCHOOL, N.W.T.

(Church of England.)

RECEIPTS.	$ cts.	$ cts.
Government grant per capita		2,002 20
" " for building		100 00
Diocesan grant		441 76
From other sources		409 10
Value of clothing received		614 49
Total receipts		3,567 55
EXPENDITURE.		
Salaries	935 00	
Food	1,317 38	
Clothing	772 64	
Fuel and light	75 73	
Building, repairs, equipment, &c.	240 99	
Miscellaneous	225 81	
	3,567 55	3,567 55

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

HOLY ANGELS BOARDING SCHOOL, N.W.T.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		2,880 00
EXPENDITURE.		
Salaries	1,000 00	
Food	1,552 50	
Fuel and light	440 00	
Clothing	1,551 90	
Total expenditure	4,544 40	
Excess of expenditure over receipts		1,664 40
	4,544 40	4,544 40

ISLE À LA CROSSE BOARDING SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		864 00
Special receipts		53 00
Total receipts		917 00
EXPENDITURE.		
Salaries	525 00	
Food	440 00	
Clothing	410 00	
Fuel and light	180 00	
Building and repairs	45 00	
Miscellaneous	22 00	
Total expenditure	1,622 00	
Excess of expenditure over receipts		705 00
	1,622 00	1,622 00

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901.—*Con.*

MUSCOWEQUAN'S BOARDING SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		2,108 40
From other sources		75 00
Total receipts		2,183 40
EXPENDITURE.		
Salaries	1,320 00	
Food	935 54	
Clothing	494 55	
Fuel and light	125 00	
Building and repairs	67 25	
Equipment and furniture	112 25	
Miscellaneous	146 60	
Total expenditure	3,201 19	
Excess of expenditure over receipts		1,017 79
	3,201 19	3,201 19

McDOUGALL ORPHANAGE, N.W.T.

(Methodist.)

RECEIPTS.	$ cts.	$ cts.
Government grant		2,846 40
Receipts from blacksmith's shop and ranch		415 00
Total receipts		3,261 40
EXPENDITURE.		
Salaries	2,165 00	
Provisions and clothing	3,179 74	
Ranch and ranch buildings	726 48	
Labour and freight	297 33	
Office expenses and interest	55 59	
Fuel and light	229 93	
Water lease	50 00	
Material for blacksmith's shop	212 53	
Equipment	304 18	
Games	4 00	
Total expenditure	7,224 78	
Paid by Methodist Missionary Society		3,963 38
	7,224 78	7,224 78

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901.—*Con.*

ONION LAKE BOARDING SCHOOL, N.W.T.

(Church of England.)

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		1,152 00
Territorial government grant towards salary of teacher		202 46
Received from private sources		1,880 29
" " Women's Auxiliary for salary of two of staff		240 00
Value of clothing and bedding received from Women's Auxiliary		238 00
EXPENDITURE.		
Salaries	1,180 00	
Groceries and provisions	1,373 00	
Coal oil and lamps	97 50	
Wood and stoves	133 00	
Furniture, desks and beds	129 25	
Buildings and repairs	800 00	
	3,712 75	3,712 75

ONION LAKE BOARDING SCHOOL, N.W.T.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		3,527 80
Amount received from boarders		489 64
" contributed from other sources		931 98
" received in gifts		31 00
" borrowed		219 67
Total receipts		5,200 09
EXPENDITURE.		
Deficit, June 30, 1900	716 06	
Salaries and expenses of staff	664 00	
Salaries of servants	220 75	
Food	2,350 12	
Clothing	524 30	
Fuel and light	155 73	
Equipment and furniture	652 32	
Miscellaneous	480 33	
Total expenditure	5,763 61	
Excess of expenditure over receipts		563 52
	5,763 61	5,763 61

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901.—*Con*

PEIGAN BOARDING SCHOOL, N.W.T.

(Church of England.)

RECEIPTS.	$ cts.	$ cts.
Government grant per capita		1,624 80
Receipts from other sources, the Church, etc		1,076 09
Value of clothing, etc., in bales		832 00
Total receipts		3,246 89
EXPENDITURE.		
Balance, July 1, 1900	155 62	
Salaries	969 35	
Food	1,041 57	
Clothing	493 36	
Fuel and light	122 95	
Building and repairs	167 07	
Equipment and furnishings	194 56	
Miscellaneous	277 47	
Total expenditure	3,421 95	
Deficit, June 30, 1901		175 06
	3,421 95	3,421 95

PEIGAN BOARDING SCHOOL, N.W.T.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		1,649 60
EXPENDITURE.		
Food	1,037 00	
Clothing	300 00	
Fuel and light	200 00	
Building and repairs	80 00	
Furniture	80 00	
Travelling expenses	104 00	
Digging well	100 00	
Painting house	40 00	
Miscellaneous	80 00	
Total expenditure	2,021 00	
Excess of expenditure over receipts		371 40
	2,021 00	2,021 00

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

ROUND LAKE BOARDING SCHOOL, N.W.T.

(Presbyterian.)

RECEIPTS.	$ cts.	$ cts.
Government grant		2,168 40
Missionary Society		1,650 00
Clothing from W. F. M. S		600 00
Total receipts		4,418 40
EXPENDITURE.		
Salaries	2,050 00	
Food	1,000 00	
Clothing	800 00	
Fuel and light	300 00	
Miscellaneous	668 40	
Total expenditure	4,818 40	
Excess of expenditure over receipts		400 00
	4,818 40	4,818 40

SARCEE BOARDING SCHOOL, N.W.T.

(Church of England.)

RECEIPTS.	$ cts.	$ cts.
Government grant, per capita		909 60
" " special for painting		201 88
Received from other sources, the Church, &c.		714 23
Value of clothing, &c., in bales		312 00
Total receipts		2,137 71
EXPENDITURE.		
Balance, July 1, 1900	193 42	
Salaries	606 50	
Food	470 57	
Equipment and furnishings	150 50	
Clothing	251 25	
Fuel and light	125 95	
Building and repairs	420 77	
Miscellaneous	111 25	
Total expenditure	2,330 21	
Deficit, June 30, 1901		192 50
	2,330 21	2,330 21

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

ST. ALBERT BOARDING SCHOOL, N.W.T.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		5,407 40
EXPENDITURE.		
Salaries—none paid		
Farm worker	720 00	
Wages of baker	240 00	
Food	1,087 00	
Clothing	418 54	
Fuel and light	52 34	
Buildings	1,514 00	
Last year's deficit	9,228 75	
Miscellaneous	150 00	
Total expenditure	13,410 63	
Excess of expenditure over receipts		8,003 23
	13,410 63	13,410 63

THUNDERCHILD'S BOARDING SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant, per capita		189 60
" " for building		2,500 00
Total receipts		2,689 60
EXPENDITURE.		
Salaries	150 00	
Food	201 98	
Clothing	212 22	
Fuel and light	25 00	
Buildings	2,850 00	
Equipment and furniture	482 50	
Miscellaneous	83 50	
Total expenditure	4,005 20	
Excess of expenditure over receipts		1,315 60
	4,005 20	4,005 20

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

ALBERNI BOARDING SCHOOL, B.C.

(Presbyterian).

RECEIPTS.	$ cts.	$ cts.
Government grant		1,500 00
Church grant		1,489 70
Clothing from W.F.M.S.		350 00
Total receipts		3,339 70
EXPENDITURE.		
Salaries	1,263 70	
Food	910 81	
Clothing	390 78	
Fuel and light	40 00	
Building and repairs	91 75	
Equipment and furniture	360 54	
Miscellaneous	282 12	
	3,339 70	3,339 70

CLAYOQUOT BOARDING SCHOOL, B.C.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		2,186 00
Contributions from other sources		160 00
Total receipts		2,346 00
EXPENDITURE.		
Salaries	598 50	
Food	1,333 59	
Clothing	870 50	
Fuel and light	201 20	
Building and repairs	534 01	
Equipment and furniture	720 38	
Miscellaneous	132 10	
Total expenditure	4,390 28	
Excess of expenditure over receipts		2,044 28
	4,390 28	4,390 28

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STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

PORT SIMPSON GIRLS' HOME, B.C.

(Methodist).

RECEIPTS.	$ cts.	$ cts.
Cash on hand, June 30, 1900		95 73
Government grant		1,200 00
Women's Missionary Society grant		2,984 25
From other sources		1 50
Total receipts		4,281 48
EXPENDITURE.		
Salaries	1,450 00	
Food	1,108 92	
Fuel and light	283 20	
Building and repairs	420 60	
Equipment and furniture	165 25	
Miscellaneous	499 74	
Total expenditure	4,364 22	
Excess of expenditure over receipts		82 74
	4,364 22	4,364 22

ST. MARY'S MISSION BOARDING SCHOOL, B.C.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		3,600 00
Proceeds of farm and garden		1,800 00
Grant from Mission		2,125 00
From other sources		275 25
Total receipts		7,800 25
EXPENDITURE.		
Salaries	1,940 00	
Food	4,520 00	
Clothing	300 00	
Fuel and light	425 25	
Building and repairs	500 00	
Equipment and furniture	325 45	
Miscellaneous	798 00	
Total expenditure	8,808 70	
Excess of expenditure over receipts		1,008 45
	8,808 70	8,808 70

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

SQUAMISH BOARDING SCHOOL, B.C.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		1,965 00
From the Church		800 00
Total receipts		2,765 00
EXPENDITURE.		
Food and clothing	2,100 00	
Equipment	230 00	
Farm instructor's wages	360 00	
Fuel and light	75 00	
	2,765 00	2,765 00

YALE (ALL HALLOWS) BOARDING SCHOOL, B.C.

(Church of England).

RECEIPTS.	$ cts.	$ cts.
Balance on hand, June 30, 1900		91 83
Government grant		1,347 00
Donations		128 00
Grant from S.P.C.K		480 00
Proceeds from sale of fruit		45 00
Grant from New England Society		1,660 00
Total receipts		3,751 83
EXPENDITURE.		
Insurance	116 00	
Repairs	275 00	
Laundry	237 00	
Salaries	340 00	
Gift	12 00	
Cost of management	1,255 00	
Travelling expenses	12 55	
Hospital and medicines	25 00	
Equipment	25 00	
Stationery	25 50	
Freight	35 00	
Boots and shoes	15 00	
Garden seeds, &c.	10 00	
Total expenditure	2,383 05	
Balance on hand, June 30, 1901	1,368 78	
	3,751 83	3,751 83

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

MOHAWK INSTITUTE, ONT.

(Undenominational).

RECEIPTS.	$ cts.	$ cts.
Government grant, per capita		5,460 00
Receipts from industrial departments		2,847 31
Cash receipts from sales—trade, $16.43; farm, $2,709.20		2,725 63
Total receipts		11,032 94
EXPENDITURE.		
Salaries	2,712 40	
Food	3,370 28	
Clothing	1,227 77	
Washing, heating and lighting	969 50	
Repairs and insurance	485 04	
Furniture, bedding and house sundries	326 74	
Printing, postage and office expenses	24 50	
Medical expenses	143 37	
Funeral "	11 00	
Sundries—school requisites, library, prizes, telephone, etc	228 79	
Material and wages for industrial departments	4,272 04	
Total expenditure	13,771 43	
Excess of expenditure over receipts (paid by New England Company)		2,738 49
	13,771 43	13,771 43

MOUNT ELGIN INDUSTRIAL SCHOOL, ONT.

(Methodist).

	$ cts.	$ cts.
Estimated value of stock, June 30, 1900		17,524 27
Salaries of principal, teachers, matron, cook and domestic servants	2,045 90	
Farm labour, $1,474.05; blacksmithing, $144.79	1,618 84	
Farm implements and repairs, $414.55; harness and repairs, $79.04	493 59	
Live stock purchased, $2,447.78; feed, $576.54	3,024 32	
Seed and fruit trees, grain and grinding	667 68	
Travelling expenses, $48.55; freight and express, $42.33	90 88	
Groceries, provisions, coal and wood	1,700 74	
Books, stationery, printing and postage	115 18	
Clothing and material, boots and shoes	717 24	
Dry goods, $349.99; hardware, $261.88	611 87	
Medical attendance and drugs	41 03	
Furnishings, $181.75; school furniture, $104.40	286 15	
Pasture, rent of land, $188.47; lighting, $58.29	246 76	
Insurance, $80; wood ashes, $40.82; incidentals, $101.02	221 84	
Tile draining, $105.16; fencing, $10; plaster and lime, $27.05	142 21	
Shoemaker's wages and material	217 88	
Material in carpenter shop	103 60	
		12,345 71
		29,869 98
Less by sale of live stock	7,433 84	
" proceeds of work in shoe shop	213 59	
" " carpenter shop	187 26	
Present estimated value of live stock on June 30, 1901	15,998 21	
		23,832 90
		6,037 08
Government grant, per capita		6,000 00
Deficit, June 30, 1901		37 08

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

SHINGWAUK HOME, ONT.

(Church of England).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		4,212 00
" (special purposes)		62 37
From other sources		4,800 00
Total receipts		9,074 37
EXPENDITURE.		
Salaries	2,954 79	
Food	3,233 09	
Clothing	979 65	
Fuel and light	955 72	
Buildings and repairs	240 76	
Equipment and furniture	19 34	
Office expenses, insurance, &c.	295 36	
Travelling expenses	113 74	
Hospital expenses and doctor	287 88	
Pocket money	64 70	
Laundry expenses	131 64	
Miscellaneous	87 18	
Deficit, July 1, 1900	795 39	
Total expenditure	10,159 24	
Apparent gross deficit		1,084 87
	10,159 24	10,159 24
	$ cts.	
Gross deficit	1,084 87	
Partially covered by stock and cash due from S.P.C.K., England	415 85	
Actual cash deficit	669 02	
	1, 84 87	1,084 87

WIKWEMIKONG INDUSTRIAL SCHOOLS, ONT.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant		6,000 00
" " for two day teachers		600 00
Clothing contributed by parents		50 00
Amounts contributed by mission		3,835 00
		10,485 00
EXPENDITURE.		
Salaries	1,388 00	
Board and clothing of staff	2,600 00	
Food	2,950 00	
Clothing	1,350 00	
Fuel	450 00	
Light	450 00	
Repairs	1,195 00	
Paid to apprentices	102 00	
	10,485 00	10,485 00

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

BRANDON INDUSTRIAL SCHOOL, MAN.

(Methodist).

RECEIPTS.	$ cts.	$ cts.
Balance on hand, June 30, 1900		84 61
Government grant (per capita)		11,958 00
Methodist Missionary Society grant		42 00
Receipts from sales of farm stock		148 83
Inspector's board		17 00
Total receipts		12,250 44
EXPENDITURE.		
Provisions	3,210 61	
Clothing	1,899 72	
House expenses	274 11	
Repairs	52 60	
Farm expenses	395 61	
" equipment	94 41	
House "	410 81	
Salaries	4,358 02	
Light	134 71	
Games	49 00	
Fuel	994 40	
Carpenter shop	31 48	
Transport of pupils	68 30	
Interest and discount	12 48	
Office expenses	65 20	
Telegrams	5 52	
Freight	20 85	
Travelling expenses	128 50	
Extra labour	43 55	
Total expenditure	12,249 88	
Balance on hand, June 30, 1901	0 56	
	12,250 44	12,250 44

*ELKHORN INDUSTRIAL SCHOOL, MAN.

RECEIPTS.	$ cts.	$ cts.
Government		17,591 80
Sundry receipts		578 71
		18,170 51
EXPENDITURE.		
Salaries	4,287 88	
Stock and equipment	1,283 69	
Dry-goods and clothing	2,088 24	
Groceries and provisions	3,386 07	
Material and repairs	727 49	
Fuel and light	1,669 09	
Travelling expenses	1,195 78	
Building and fixtures	2,652 32	
Miscellaneous	367 59	
Indian Department (sundry receipts)	512 36	
	18,170 51	18,170 51

*NOTE.—All expenses in connection with this school are paid by the Government.

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

*RUPERT'S LAND INDUSTRIAL SCHOOL, MAN.

	$ cts.	$ cts.
RECEIPTS.		
Government grant		23,133 68
EXPENDITURE.		
Salaries	5,183 46	
Food	5,616 20	
Clothing	2,906 02	
Fuel	2,092 38	
Light	114 28	
Building and repairs	3,467 04	
Miscellaneous	3,104 87	
	23,133 68	23,133 68

ST. BONIFACE INDUSTRIAL SCHOOL, MAN.

(Roman Catholic).

	$ cts.	$ cts.
RECEIPTS.		
Balance of government grant, March quarter, 1900		84 32
Government grant (per capita)		9,528 70
Government grant, furnaces, closets and wash troughs		1,515 85
One steam boiler sold		75 00
Total receipts		11,203 87
EXPENDITURE.		
Deficit, June 30, 1900	80 14	
Provisions	2,681 56	
Clothing	1,631 08	
Fuel and light	867 58	
House equipment	432 63	
" special grant	1,515 85	
Salaries	2,944 35	
Miscellaneous	1,587 29	
Total expenditure	11,740 48	
Excess of expenditure over receipts		536 61
	11,740 48	11,740 48

*NOTE.—All expenses in connection with this school are paid by the Government.

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901.—*Con*,

BATTLEFORD INDUSTRIAL SCHOOL, N.W.T.

(Church of England).

RECEIPTS.	$ cts.	$ cts.
Government grant, per capita		14,090 38
" " buildings and repairs		2,183 61
From other sources		1,950 88
Total receipts		18,224 87
EXPENDITURE.		
Trade shops	64 37	
Farm and garden	577 08	
Live stock	143 00	
House equipment and furniture	507 93	
Clothing	2,657 80	
Dispensary and medical attendance	8 60	
Games and entertainment	28 67	
Express and freight	237 51	
Labour	107 87	
Fuel and heating	2,018 75	
Light	229 83	
Miscellaneous	39 65	
Provisions	4,703 29	
Repairs and buildings	2,195 79	
Salaries	4,230 15	
School material	45 97	
Telegrams and travelling expenses	111 35	
Total expenditure	17,907 61	
Balance on hand, June 30, 1901	317 26	
	18,224 87	18,224 87

CALGARY INDUSTRIAL SCHOOL, N.W.T.

EXPENDITURE.	$ cts.	
Salaries	2,718 04	
Food	2,534 37	
Clothing	1,700 31	
Furnishing	174 63	
Management	2,088 50	
Buildings	870 39	
Total expenditure		10,086 24

NOTE.—All expenses in connection with this school are paid by the Government.

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

QU'APPELLE INDUSTRIAL SCHOOL, N.W.T.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant per capita, balance 1899--1900		1,145 80
" " " " year 1900--1901		24,217 21
" " above per capita for buildings, medical attendance, equipment, repairs and postage		1,799 98
Amount earned by shops		1,411 21
" overdrawn at bank		327 80
Total receipts		28,902 00
EXPENDITURE.		
Salaries { Paid out of per capita grant, $7,255.30 / " above " " " 600.00 }	7,855 30	
Provisions	7,749 66	
Clothing	3,240 58	
Fuel and light	2,768 10	
Building and repairs { Paid out of p. c. grant, $808.85 / " above " " 606.39 }	1,415 24	
Equipment { Paid out of p. c. grant, $944.89 / " above " " 243.86 }	1,188 75	
Miscellaneous { Paid out of p. c. grant, $6,647.45 / " above " " 349.73 }	6,997 18	
Total expenditure	31,214 81	
Balance on hand, July 1, 1900		19 62
Capitation grant due 1900--1901		1,243 85
Deficit, June 30, 1901		1,049 34
	31,214 81	31,214 81

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

RED DEER INDUSTRIAL SCHOOL, N.W,T.

(Methodist).

RECEIPTS.	$ cts.	$ cts.
Cash on hand, July 1, 1900		9 74
Methodist Missionary Society, earnings of school		8,600 00
Indian Department		1,808 59
Unpaid accounts		321 82
EXPENDITURE.		
Interest and discount	19 50	
Clothing	1,287 22	
Drugs	89 26	
Engine-house	18 75	
Fixtures	10 80	
Fuel	205 60	
Games	38 19	
House equipment	447 47	
House expenses	191 53	
Light	89 23	
Office expenses	64 83	
Provisions	2,543 77	
Repairs and new buildings	744 51	
Salaries	3,712 53	
School material	4 29	
Travelling expenses	452 24	
Carpenter's shop equipment	3 10	
Farm equipment	334 26	
Farm	406 77	
Farm live stock	69 00	
Cash on hand, June 30, 1901	7 30	
	10,740 15	10,740 15

REGINA INDUSTRIAL SCHOOL, N.W.T.

(Presbyterian).

RECEIPTS.	$ cts.	$ cts.
Balance on hand, July 1, 1900		35 05
Government grant (per capita)		9,513 00
Amount of contributions from other sources		1,945 61
Total receipts		11,493 66
EXPENDITURE.		
Salaries	3,638 15	
Provisions	3,178 50	
Clothing	834 66	
Fuel and light	1,693 02	
House and kitchen equipment	506 04	
Miscellaneous	1,588 94	
Balance on hand, June 30, 1901	54 35	
	11,493 66	11,493 66

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

HIGH RIVER INDUSTRIAL SCHOOL, N.W.T.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Government grant (per capita)		9,334 95
" for repairs		150 00
Farm produce sold		1,340 15
Total receipts		10,825 10
EXPENDITURE.		
Salaries	4,634 00	
Food	2,851 47	
Clothing	791 54	
Fuel and light	748 10	
Buildings and repairs	175 20	
Equipment and furniture	320 55	
Miscellaneous	774 41	
New goods purchased	1,609 75	
Total expenditure	11,905 02	
Excess of expenditure over receipts		1,079 92
	11,905 02	11,905 02

ALERT BAY INDUSTRIAL SCHOOL, B.C.

Church of England).

RECEIPTS.	$ cts.	$ cts.
Government grant		2,127 67
Church Missionery Society		480 00
From other sources		50 00
From carpenter's shop		196 90
Total receipts		2,854 57
EXPENDITURE.		
Salaries	995 00	
Food	811 75	
Clothing	375 00	
Fuel and light	135 25	
Equipment	73 00	
Repairs	36 00	
Miscellaneous	123 50	
Deficit, July 1, 1900	419 08	
Total expenditure	2,968 58	
Excess of expenditure over receipts		114 01
	2,968 58	2,968 58

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

COQUALEETZA INDUSTRIAL SCHOOL, B.C.

(Methodist).

RECEIPTS.	$ cts.	$ cts.
Government grant		9,386 00
Receipts from sales of live stock, wheat, hay and other produce, also from trades department		1,765 10
EXPENDITURE.		
Salaries	3,682 70	
Food	2,756 15	
Clothing	1,383 80	
Fuel and light	314 52	
Building and repairs	402 39	
Equipment and furniture	2,037 74	
Miscellaneous	573 80	
	11,151 10	11,151 10

KAMLOOPS INDUSTRIAL SCHOOL, B.C.

(Roman Catholic).

RECEIPTS.	$ cts.	$ cts.
Balance on hand, July 1, 1900		51 72
Government grant		6,428 50
Receipts from farm and shoe-shop		19 76
Miscellaneous		8 00
Total receipts		6,507 98
EXPENDITURE.		
Salaries	2,765 00	
Food	1,476 95	
Clothing	552 61	
Fuel and light	173 25	
Building and repairs	331 36	
Equipment and furniture	505 94	
Miscellaneous	674 05	
Total expenditure	6,479 16	
Balance on hand, June 30, 1901	28 82	
	6,507 98	6,507 98

STATEMENT of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

KOOTENAY INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		6,500 00
From farm produce		350 00
Total receipts		6,850 00
EXPENDITURE.		
Salaries	1,360 00	
Food	3,000 00	
Clothing	1,400 00	
Fuel and light	235 00	
Lumber	100 00	
Miscellaneous	1,000 00	
Total expenditure	7,095 00	
Excess of expenditure over receipts		245 00
	7,095 00	7,095 00

KUPER ISLAND INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

RECEIPTS.	$ cts.	$ cts.
Government grant		6,500 00
From other sources		63 55
Special grant for sewer system		204 15
Balance on hand, July 1, 1900		4 86
Total receipts		6,772 56
EXPENDITURE.		
Salaries	2,587 50	
Food	1,802 83	
Clothing	985 87	
Fuel and light	74 35	
Building and repairs	632 31	
Equipment and furniture	286 39	
Cost of sewer system	204 15	
Miscellaneous	310 99	
Total expenditure	6,884 39	
Excess of expenditure over receipts		111 83
	6,884 39	6,884 39

STATEMENET of Receipts and Expenditure for the Year ended June 30, 1901—*Con.*

METLAKAHTLA INDUSTRIAL SCHOOL, B.C.

(Church of England.)

	$ cts.	$ cts.
RECEIPTS.		
Government grant, per capita		5,822 21
Milk sold		40 28
Receipts from work done by instructor and pupils		48 75
Fuel sold		27 00
Total receipts		5,938 24
EXPENDITURE.		
Deficit on June 30, 1900	288 49	
Salaries	2,061 17	
Day labour	294 25	
Food	2,074 96	
Clothing	562 38	
Fuel and light	467 90	
Building and repairs	102 52	
Equipment	157 92	
Miscellaneous	286 06	
Total expenditure	6,295 65	
Excess of expenditure over receipts		357 41
	6,295 65	6,295 65

WILLIAMS LAKE INDUSTRIAL SCHOOL, B.C.

(Roman Catholic.)

	$ cts.	$ cts.
RECEIPTS.		
Government grant (per capita)		6,500 00
Receipts from harness shop		338 97
Receipts from boys' work		670 31
Receipts from clothing contributed		12 00
Total receipts		7,521 28
EXPENDITURE.		
Deficit on June 30, 1900	3,000 00	
Interest on $3,000 for 12 months at 5 per cent	150 00	
Salaries	3,550 00	
Food	2,988 00	
Clothing	939 00	
Light	120 00	
Equipment and furniture	102 00	
Laundry	70 00	
Building, repairs and water-works	872 00	
Total expenditure	11,791 00	
Excess of expenditure over receipts		4,269 72
	11,791 00	11,791 00

SCHOOL

SHOWING the Condition of Indian Day Schools in the Dominion (from

School.	Reserve.	Agency.	Teacher.	Denomination.
ONTARIO.				
Alnwick	Alnwick	Alnwick	Wm. J. Garland	Methodist
Back Settlement	Caradoc	Caradoc	Miss Bessie Ward	Undenominational
Bear Creek	"	"	" Martha Nicholls	"
Buzwah	Manitoulin Island	Manitowaning	David Craddock	Roman Catholic
Cape Croker	Cape Croker	Cape Croker	Miss Rachel Glazier	Undenominational
*Christian Island	Christian Island	Penetanguishene	Alfred McCue	Methodist
Fort William (boys)	Fort William	Western	Sister M. Ambrose	Roman Catholic. }
" (girls)	"	"	" "	" " }
French Bay	Saugeen	Saugeen	T. J. Wallace	Undenominational
Garden River (R.C.)	Garden River	Sault St. Marie	Rev. H. Caron, S.J.	Roman Catholic
" (C.E.)	"	"	Miss Ethel M. Frost	Church of England
Georgina Island	Georgina Island	Rama	C. B. Oakley	Methodist
†Gibson	Watha	Parry Sound	A. Kniewasser	"
Golden Lake	Golden Lake	Golden Lake	Lucinda M. Casey	Roman Catholic
Henvey Inlet	Henvey Inlet	Parry Sound	Adda McIntosh	Undenominational
Hiawatha	Rice Lake	Alnwick	J. A. Windsor	Methodist
Jackfish Island	Jackfish Island	Western	J. A. Blais	Roman Catholic
Kettle Point	Kettle Point	Sarnia	Miss Ethel E. Jacobs	Undenominational
Lake Helen	Red Rock	Western	Mrs. J. H. McKay	Roman Catholic
Mattawa	At Mattawa	"	Rev. Sis. St. Gregory	" "
Michipicoten	Michipicoten	Sault Ste. Marie	Miss Teresa Clarke	" "
‡Missinabie		"	" M. A. Oldham	Undenominational
Mississagi River	Mississagi	Thessalon	" Lucy Heiss	Roman Catholic
Moraviantown	Moravian	Moravian	" Mary J. Smith	Undenominational
Mud Lake	Mud Lake	Rice Lake	Joseph Whetung	"
Muncey	Caradoc	Caradoc	John Case	Church of England
Naughton	Whitefish Lake	Manitowaning	Richard Black	Methodist
New Credit	New Credit	New Credit	Miss Mary G. Bogle	Undenominational
Nipissing	Nipissing	Parry Sound	" Helen F. Quinn	"
Oneida No. 2	Oneida	Oneida	Levi T. Doxtator	Church of England
" No. 3	"	"	C. A. Vollick	Methodist
Pays Plat	Pays Plat	Western	Miss Alice Barker	Roman Catholic
Pic River	Pic River	"	Moses Madwayosh	" "
Port Elgin	Cape Croker	Cape Croker	Thos. R. Ferguson	Undenominational
Rama	Rama	Rama	John Laurence	Methodist
River Settlement	Caradoc	Caradoc	Joseph Fisher	Undenominational
Ryerson	Parry Island	Parry Sound	Miss E. R. Walther	"
Sagamook	Spanish River	Thessalon	Peter J. Taylor	Roman Catholic
Saugeen	Saugeen	Saugeen	Miss Lillian Edwards	Undenominational
Scotch Settlement	"	"	John Burr	"

* School closed December quarter 1900. † Only one return received. ‡ Indian children attend white

SESSIONAL PAPER No. 27

STATEMENT

which Returns have been received) for the Year ended June 30, 1901.

Appropriation for Salary or yearly grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												Ontario.
250 00	Band and Methodist..	18	16	34	14	23	5	4	2	....	....	Alnwick.
200 00	Band...	12	5	17	8	10	2	1	4	....	....	Back Settlement.
200 00	"	17	5	22	10	14	6	2	....	....	....	Bear Creek.
200 00	"	7	5	12	6	7	3	1	1	....	....	Buzwah.
300 00	"	12	4	16	7	7	1	6	2	...	....	Cape Croker.
275 00	Band and Methodist..	11	15	26	15	11	11	4	...	....	....	Christian Island.
500 00	Voted.....	18	...	18	10	6	7	5	....	....	....	Fort William (boys).
		....	16	16	6	10	4	2	...	....	....	" (girls).
300 00	Band.....	9	13	22	14	14	2	5	1	....	...	French Bay.
500 00	Vote and Band.....	25	29	54	40	33	10	5	6	....	....	Garden River (R.C.)
300 00	Band.....	17	25	42	16	9	13	12	5	3	....	" (C.E.)
300 00	Band and Methodist..	12	6	18	10	8	5	3	2	....	....	Georgina Island.
250 00	" " ..	8	11	19	15	6	3	6	4	...	....	Gibson.
300 00	Voted	12	12	24	10	11	3	5	2	3	....	Golden Lake.
250 00	Vote and Band..	8	16	24	13	8	6	5	5	....	....	Henvey Inlet.
300 00	Band and Methodist..	5	6	11	4	1	2	2	5	1	....	Hiawatha.
250 00	Voted.....	7	3	10	6	6	4	....	....	....	....	Jackfish Island.
250 00	Band.....	8	12	20	7	10	4	2	4	....	....	Kettle Point.
250 00	Voted.	15	10	25	12	13	11	1	....	....	...	Lake Helen.
100 00	"	13	12	25	18	17	4	2	1	1	....	Mattawa.
250 00	"	15	10	25	11	24	1	....	....	...	....	Michipicoten.
.....	....	4	2	6	2	6	....	....	....	....	....	Missanabie.
250 00	Voted.....	15	11	26	4	18	6	2	....	....	...	Mississagi River.
300 00	Band.....	27	22	49	27	22	7	15	5	....	...	Moraviantown.
200 00	"	23	16	39	14	15	12	5	3	4	....	Mud Lake.
200 00	Voted.....	10	8	18	7	8	3	4	2	1	....	Muncey.
200 00	Vote and Methodist...	4	5	9	6	1	2	2	3	1	....	Naughton.
285 00	Band.....	21	12	33	17	14	3	9	3	3	1	New Credit.
250 00	"	11	10	21	16	12	5	1	2	1	...	Nipissing.
150 00	Vote & Church of Eng,	19	14	33	23	21	6	6	....	....	....	Oneida No. 2.
300 00	Vote and Methodist...	17	25	42	22	19	10	6	7	....	....	" No. 3.
250 00	Voted.....	10	7	17	8	7	2	8	....	....	....	Pays Plat.
250 00	"	9	9	18	7	6	2	6	4	....	....	Pic River.
300 00	Band.....	16	8	24	7	15	8	1	....	...	....	Port Elgin.
250 00	Band and Methodist..	18	20	38	18	20	3	7	7	1	....	Rama.
200 00	Band.....	23	16	39	17	17	12	7	3	...	....	River Settlement.
250 00	"	13	9	22	9	12	6	....	2	2	....	Ryerson.
250 00	Voted.....	14	10	24	11	22	....	2	....	...	....	Sagamook.
300 00	Band.....	21	11	32	18	18	6	3	5	....	....	Saugeen.
300 00	"	16	15	31	20	15	6	7	3	....	....	Scotch Settlement.

school. Fees paid by department.

SCHOOL

SHOWING the Condition of Indian Day Schools in the Dominion (from

School.	Reserve.	Agency.	Teacher.	Denomination.
ONTARIO—*Concluded.*				
Serpent River	Serpent River	Thessalon	Miss Marie Markle	Roman Catholic
Shawanaga	Shawanaga	Parry Sound	" Nellie Holton	Undenominational
Sheguiandah	Sheguiandah	Manitowaning	Benz. Fuller	Church of England
*Sheshegwaning	Sheshegwaning	Gore Bay	Miss Mary E. O'Reilly	Roman Catholic
Sidney Bay	Cape Croker	Cape Croker	" Annie D. Carson	Undenominational
Six Nations, No. 1	Six Nations	Six Nations	Peter Hunks	"
" No. 2	"	"	John Clark	"
" No. 3	"	"	Miss Beatrice Russell	"
" No 5	"	"	John Lickers	"
" No. 6	"	"	Elam D. Bearfoot	"
" No. 7	"	"	Geo. Robertson	"
" No. 9	"	"	C. A. Parks	"
" No. 10	"	"	Miss Lizzie Davis	"
" No. 11	"	"	" Sara Davis	"
Skene	Parry Island	Parry Sound	Robert Moir	"
South Bay	South Bay	Manitowaning	Anna R. Peacock	Roman Catholic
Spanish River	Spanish River	Thessalon	Carrie Morley	Church of England
St. Clair	Sarnia	Sarnia	Alice M. Matthews	Methodist
Sucker Creek	Sucker Creek	Manitowaning	E R. Allman	Church of England
†Thessalon	Thessalon River	Thessalon	Adl. D'Lamorandiere	Roman Catholic
Thomas	Six Nations	Six Nations	John Miller	Undenominational
Tyendinaga (Eastern)	Tyendinaga	Tyendinaga	Miss Lizzie Harvey	"
" (Western)	"	"	Alexander Leween	"
" (Central)	"	"	Miss Ora Weaver	"
" (Mission)	"	"	" Edith M. Goode	"
Walpole Island, No. 1	Walpole Island	Walpole Island	Albert J. Sahguj	Church of England
" No. 2	"	"	A. Miskokoman	Methodist
" No. 3	"	"	Joseph Sampson	Undenominational
West Bay	West Bay	Gore Bay	Mary E. O'Reilly	Roman Catholic
Whitefish Lake	Whitefish Lake	Manitowaning	Josephine Bisaillon	"
Whitefish River	Whitefish River	"	S. H. Ferris	Church of England
Wikwemikong (boys)	Manitoulin Island, unceded	"	Albert A. Capps	Roman Catholic
" (girls)	Manitoulin Island.	"	Miss A. Baudin	"
Wikwemikongsing	Wikwemikongsing	"	Eugenie Dontenville.	"
Total, Ontario				

* No return received for March and June quarters, 1901.

† School closed during September and December quarters, 1900.

SESSIONAL PAPER No. 27

STATEMENT.—*Continued.*

which Returns have been received) for the Year ended June 30, 1901.

Appropriation for Salary or yearly grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												Ontario—*Concluded.*
250 00	Voted	8	8	16	5	6	8	2	....	....	...	Serpent River.
250 00	Vote and Band	14	9	23	7	13	6	3	1	....	....	Shawanaga.
300 00	Band	16	12	28	10	10	9	7	2	....	....	Sheguiandah.
250 00	"	8	8	16	10	12	4	....	....	....	....	Sheshegwaning.
300 00	"	13	10	23	12	3	4	6	6	4	....	Sidney Bay.
		24	15	39	17	15	11	7	4	2	....	Six Nations, No. 1.
		27	36	63	32	15	22	9	4	9	4	" No. 2.
		37	26	63	21	34	10	12	4	3	....	" No. 3.
		26	11	37	25	7	13	6	6	4	1	" No. 5.
2950 00	Vote and Band	8	9	17	9	10	2	3	2	....	....	" No. 6.
		44	48	92	26	59	14	12	4	3	....	" No. 7.
		16	18	34	21	11	6	6	5	3	3	" No. 9.
		26	30	56	24	26	13	12	4	1	....	" No. 10.
		17	17	34	17	14	7	12	1	....	....	" No. 11.
200 00	Band	7	5	12	8	4	2	5	1	....	....	Skene.
200 00	"	17	19	36	18	25	6	2	3	....	....	South Bay.
200 00	Voted	5	8	13	4	11	2	....	....	....	....	Spanish River.
300 00	Band and Methodist	23	22	45	19	21	10	8	4	2	....	St. Clair.
225 00	Band	7	6	13	6	6	4	3	....	....	....	Sucker Creek.
300 00	Voted	6	8	14	9	10	4	....	....	....	....	Thessalon.
362 50	Band	37	26	63	30	25	12	14	7	5	....	Thomas.
125 00	"	41	22	63	27	52	5	6	....	....	....	Tyendinaga (Eastern).
225 00	"	18	12	30	11	19	4	2	2	2	1	" (Western).
140 00	"	15	16	31	15	18	4	4	5	....	....	" (Central).
225 00	"	41	25	66	33	48	12	2	3	1	....	" (Mission).
200 00	Band and Ch. of Eng.	30	20	50	20	21	11	13	5	....	....	Walpole Island, No. 1.
300 00	Vote and Methodist	20	13	33	20	17	11	3	2	....	....	" No. 2.
300 00	Band	16	10	26	8	14	5	2	5	....	....	" No. 3.
250 00	"	11	17	28	15	21	5	1	....	1	....	West Bay.
250 00	Voted	11	10	21	14	12	3	5	1	....	....	Whitefish Lake.
250 00	"	7	6	13	7	5	7	1	....	....	....	Whitefish River.
300 00	"	61	....	61	11	30	7	9	9	5	1	Wikwemikong (boys).
300 00	"	....	20	20	8	16	....	3	....	1	....	" (girls).
200 00	"	15	6	21	12	7	9	3	2	....	....	Wikwemikongsing.
....	....	1212	989	2201	1036	1133	458	347	185	67	11	Total, Ontario.

SCHOOL

SHOWING the Condition of Indian Day Schools in the Dominion (from

School.	Reserve.	Agency.	Teacher.	Denomination
QUEBEC.				
*Becancour	Becancour	Becancour	Malvina Robichaud	Roman Catholic
Bersimis	Bersimis	Bersimis'	Mrs. S. Roy	"
Caughnawaga (boys)	Caughnawaga	Caughnawaga	Peter J. DeLisle	"
" (girls)	"	"	Miss Nellie Gibbons.	"
" (mission)	"	"	Rev. J. J. Oke	Methodist
Cornwall Island	St. Regis	St. Regis	W. J. Bishop	Undenominational
Lorette	Lorette	Lorette	Sr. St. Stanislas	Roman Catholic
Maniwaki	Maniwaki	Maniwaki	Miss Annie O'Connor	"
Maria	Maria	Maria	Miss Ida Bujold	"
Oka (country)	Oka	Oka	Miss Elizabeth Sly	Methodist
" (village)	"	"	Miss E. M. Williams	"
Pointe Bleue	Pointe Bleue	Pointe Bleue	Mrs. O. P. Dufresne.	Roman Catholic
Restigouche	Restigouche	Restigouche	Miss Mary Isaac	"
St. Francis (Prot)	St-Francis	Pierreville	Rev. H. O. Loiselle	Church of England
" (R.C.)	"	"	Sr. Mary Josephine	Roman Catholic
St. Regis	St. Regis	St. Regis	Katherine Hughes	Undenominational
Temiscaming	Temiscaming	Temiscaming	James McCarragher.	Roman Catholic
" (mission)	"	"	Sister St. Perpetue	"
Total, Quebec				
NOVA SCOTIA.				
Bear River	Bear River	Digby County	J. L. DeVaney	Roman Catholic
Eskasoni	Eskasoni	Cape Breton Co	Charles Bernard	"
Half-way River	Franklin Manor	Cumberl'd County.	Miss W. B. Fulmor	"
Indian Cove	Fisher's Grant	Pictou "	John J. Martin.	"
Middle River	Middle River	Victoria "	Alex. McDougall	"
Millbrook	Millbrook	Colchester "	Miss Bessie M. Smith	"
New Germany	Lunenburg	Lunenburg "	Miss Maggie J. Barss	"
Salmon River	Salmon River	Richmond "	Miss Sarah E. Boyd.	"
Shubenacadie	Indian Brook	Hants "	R. J. Logan	"
Whycocomagh	Whycocomagh	Inverness "	P. A. Murphy	"
Total, Nova Scotia				
NEW BRUNSWICK.				
Burnt Church	Church Point	Northeastern	Miss A. Gertr. Gillis	Roman Catholic
Big Cove	Big Cove	"	Miss Mary N. Babin	"
Eel Ground	Fel Ground.	"	Miss Lucy B. Walsh.	"
Kingsclear	Kingsclear	Western	Miss Frances McGinn	"
St. Mary's	St. Mary's	"	Miss M. J. Rush	"
Tobique	Tobique	"	Miss P. M. Goodine.	"
Total, New Brunswick				
PRINCE EDWARD ISLAND.				
Lennox Island	Lennox Island	P.E.I. Sup'c'y	John F. Arsenault	Roman Catholic

*Indian children attend white school. Fees paid by Department.

SESSIONAL PAPER No. 27

STATEMENT.—*Continued.*

which Returns have been Received) for the Year ended June 30, 1901.

Appropriation for Salary or Yearly Grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												QUEBEC.
40 00	Voted	2	....	2	2	1	1	....	....	....	....	Becancour.
200 00	"	8	17	25	16	19	6	....	....	....	....	Bersimis.
400 00	"	124	....	124	44	104	14	6	....	....	....	Canghnawaga (boys.)
500 00	"	....	69	69	36	43	16	3	7	....	....	" (girls.)
125 00	"	17	7	24	7	18	3	2	1	....	....	" (mission.)
350 00	Band	16	9	25	8	18	5	1	1	....	....	Cornwall Island.
300 00	Voted	35	33	68	52	36	23	9	.....	....	....	Lorette.
300 00	Band	21	29	50	16	21	26	2	1	....	....	Maniwaki.
150 00	Voted	13	11	24	10	8	7	....	9	....	....	Maria.
100 00	"	11	10	21	11	16	1	4	....	....	....	Oka (country.)
125 00	"	13	10	23	12	15	2	2	2	2	....	" (village.)
150 00	"	29	39	68	22	1	4	11	25	27	....	Pointe Bleue.
200 00	"	24	21	45	25	27	4	5	7	1	1	Restigouche.
250 00	"	11	7	18	9	8	1	4	3	2	....	St. Francis (Prot.)
290 00	"	38	23	61	46	28	12	8	10	3	....	" (R.C.)
350 00	Band	27	26	53	25	29	14	9	1	....	....	St Regis.
300 00	Voted	29	26	55	24	15	20	9	8	....	3	Temiscaming.
100 00	"	5	3	8	6	3	3	2	....	....	....	" (mission).
.....	.....	423	340	763	371	410	162	77	75	35	4	Total, Quebec.
												NOVA SCOTIA.
300 00	Voted	11	8	19	9	11	3	3	....	2	....	Bear River.
200 00	"	15	8	23	10	15	5	1	2	....	....	Eskasoni.
100 00	"	5	4	9	3	6	1	1	.....	....	1	Half-way River.
300 00	"	14	11	25	16	5	7	5	8	....	....	Indian Cove.
200 00	"	12	9	21	9	13	1	4	1	2	....	Middle River.
250 00	"	16	15	31	15	8	8	4	9	2	....	Millbrook.
300 00	"	3	8	11	8	3	2	2	4	....	....	New Germany.
250 00	"	13	12	25	5	14	3	3	3	1	1	Salmon River.
300 00	"	11	9	20	6	9	2	3	2	3	1	Shubenacadie.
200 00	"	8	13	21	8	18	....	3	....	....	....	Whycocomagh.
.....	.....	108	97	205	89	102	32	29	29	10	3	Total, Nova Scotia.
												NEW BRUNSWICK.
250 00	Voted	14	11	25	10	18	2	3	1	....	1	Burnt Church.
250 00	"	22	12	34	9	14	6	6	4	4	....	Big Cove.
250 00	"	5	9	14	8	3	5	1	3	2	....	Eel Ground.
250 00	"	13	6	19	16	7	2	2	2	....	6	Kingsclear.
250 00	"	11	9	20	16	8	6	4	1	1	...	St. Mary's.
240 00	Vote and Band	10	21	31	15	19	4	3	5	....	....	Tobique.
.....	.....	75	68	143	74	69	25	19	16	7	7	Total, New Brunswick.
												PRINCE EDWARD ISLAND
300 00	Voted	14	7	21	11	5	5	4	4	3	...	Lennox Island.

SCHOOL

SHOWING the Condition of Indian Day Schools in the Dominion (from

School.	Reserve.	Agency.	Teacher.	Denomination.
BRITISH COLUMBIA.				
Ahousaht	Ahousaht	West Coast	John W. Russell	Presbyterian
Aiyansh	Kitladamicks	Northwest Coast	Rev. J. B. McCullagh	Church of England
Alert Bay	Nimkish	Kwawkewlth	Mrs. Elizabeth Hall	" "
Bella Bella	Bella Bella	"	Miss Mary A. Beatty	Methodist
Cape Mudge	Cape Mudge	"	R. J. Walker	"
Clayoquot	Opitsat	West Coast	Rev. Charles Moser	Roman Catholic
*Comox	Comox	Cowichan	S. F. Crawford	Presbyterian
Gitwingar	Kitwingar	Babine	Alfred E. Price	Church of England
Gwayasdums	Gwayasdums	Kwawkewlth	E. A. Bird	" "
Hazelton	Giatmaksh	Babine	Rev. John Field	" "
Kincolith	Kincolith	Northwest Coast	Rev. W. H. Collison	" "
*Kita-maat	Kita-maat	"	Miss N. Markland	" "
Kitkahtla	Kitkahtla	"	Rev. R. W. Gurd	" "
†Kisgegas	Kisgegas	Babine	Dr. V. E. R. Ardagh	" "
Kishfiax	Kishfiax	"	Rev. W. H. Pierce	Methodist
‡Kyaquot	Kyaquot	West Coast	Rev. E. Sobry	Roman Catholic
Massett	Massett	Northwest Coast	W. E. Collison	Church of England
Metlakahtla	At Metlakahtla	"	Miss Helena Jackson	" "
Nanaimo	Nanaimo	Cowichan	Mrs. E. Nicholas	Methodist
†Nitanit	Cla-oose	West Coast	Rev. Wm. J. Stone	"
Port Essington	Skeena	Northwest Coast	Miss Kate Tranter	"
Port Simpson	At Port Simpson	"	Chas. M. Richards	"
Quamichan	Quamichan	Cowichan	M. P. Keappock	Roman Catholic
Saanich	Saanich	"	Wm. Thompson	Church of England
†Skidegate	QueenCharlotteIds	Northwest Coast	Miss V. M. Lawson	Methodist
Somenos	Somenos	Cowichan	Rev. G. C. VanGothen	Roman Catholic
Songhees	Songhees	"	Sister M. Berchmans	" "
Ucluelet	Itedse	West Coast	Miss E. M. Armstrong	Presbyterian
Total, British Columbia				

*No returns received for March and June quarters, 1901.

†Only one return received.

‡School closed December quarter, 1900.

SESSIONAL PAPER No. 27

STATEMENT—*Continued.*

which Returns have been received) for the year ended June 30, 1901.

Appropriation for Salary or yearly grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												British Columbia.
300 00	Voted	27	17	44	17	19	9	16	....	....	....	Ahousaht.
300 00	"	16	5	21	18	12	2	4	3	....	...	Aiyansh.
300 00	"	11	16	27	10	11	8	3	4	....	1	Alert Bay.
300 00	"	23	23	46	19	25	14	3	4	....	....	Bella Bella.
300 00	"	10	5	15	6	9	5	1	....	....	....	Cape Mudge.
300 00	"	14	6	20	6	7	8	5	....	....	....	Clayoquot.
300 00	"	1	3	4	2	...	4	....	...	....	....	Comox.
.....	.....	5	16	21	9	13	6	2	....	....	....	Gitwingar.
300 00	Voted	17	9	26	9	20	4	2	...	....	....	Gwayasdums.
300 00	"	16	10	26	10	12	10	4	....	....	....	Hazelton.
300 00	"	11	24	35	28	17	5	10	3	....	....	Kincolith.
.....	.....	37	33	70	32	43	9	12	6	....	....	Kita-maat.
300 00	Voted	23	13	36	25	9	6	14	7	....	....	Kitkahtla.
300 00	"	12	9	21	5	21	....	....	....	....	....	Kisgegas.
300 00	"	9	12	21	15	17	3	1	..	....	....	Kishfiax.
300 00	"	11	13	24	11	20	4	....	....	...	....	Kyaquot.
300 00	"	24	26	50	25	24	14	12	....	....	...	Massett.
300 00	"	16	18	34	17	9	6	6	7	6	....	Metlakahtla.
300 00	"	8	17	25	10	14	5	4	2	....	....	Nanaimo.
300 00	"	9	13	22	13	17	4	....	1	....	....	Nitanit.
300 00	"	21	19	40	23	25	5	10	....	....	....	Port Essington.
400 00	"	52	13	65	35	38	15	9	3	....	....	Port Simpson.
300 00	"	16	1	17	7	9	4	2	2	....	....	Quamichan.
300 00	"	15	3	18	14	3	4	4	4	3	....	Saanich.
300 00	"	10	11	21	11	14	3	3	1	...	....	Skidgate.
300 00	"	15	2	17	12	15	2	....	....	....	....	Somenos.
300 00	"	13	8	21	12	8	6	....	7	....	..	Songhees.
300 00	"	14	14	28	12	16	7	3	2	....	....	Ucluelet.
.....	.....	456	359	815	413	447	172	130	56	9	1	Total, British Columbia.

SCHOOL

Showing the Condition of Indian Day Schools in the Dominion (from

School.	Reserve.	Agency.	Teacher.	Denomination.
MANITOBA.				
*Assabasca	Rainy River	Rat Portage	R. E. Atkinson	Undenominational
Berens River	Berens River	Berens River	Joseph Lawford	Methodist
Big Eddy	Pas	Pas	James Settee, jr	Church of England
Black River	Black River	Berens River	Sydney B. Barrett	" "
Brokenehad	Broken Head	Clandeboye	Fred A. W. McLean	" "
Chemawawin	Chemawawin	Pas	Richard Hooker	" "
*Couchiching	Couchiching	Couchiching	J. H. Dubois	Roman Catholic
Crane River	Crane River	Manitowapah	John Moar	Church of England
†Cross Lake	Cross Lake	Berens River	Marian Panpanekis	Methodist
Eagle Lake	Eagle Lake	Savanne	Arthur J. Bruce	Church of England
‡Ebb and Flow Lake	Ebb & Flow Lake	Manitowapah	Albert N. Adolphe	Roman Catholic
Fairford (Upper)	Fairford	"	Rev. George Bruce	Church of England
" (Lower)	"	"	Kemper Garrioch	" "
*Fisher River	Fisher River	Berens River	Jeremiah Rundle	Methodist
‡Fort Alexander (Upper).	Fort Alexander	Clandeboye	J. Arran Wilson	Church of England
" " (R. C.).	"	"	W. George Gow	Roman Catholic
Frenchman's Head	Lac Seul	Savanne	James Fox	Church of England
Grand Rapids	Grand Rapids	Pas	J. Isbester	" "
Hollowwater River	Hollowwater River	Berens River	John Sinclair	" "
Islington	Islington	Rat Portage	J. S. Newton	" "
Jackhead	Jackhead	Berens River	Robert Thomas	" "
*Lac Seul (Canoe River)	Lac Seul	Savanne	Louis LaRonde	" "
" " (Treaty Point.)	"	"	Rev. T. H. Pritchard	" "
Lake Manitoba	Lake Manitoba	Manitowapah	L. F. X. Hart	Roman Catholic
Lake St. Martin	Lake St. Martin	"	T. H. Dobbs	Church of England
Little Forks	Little Forks	Couchiching	D. W. Wood	" "
Little Saskatchewan	Little Saskatche'n.	Manitowapah	J. E. Favell	" "
Long Sault	Long Sault	Couchiching	Miss M. A. Johnson	" "
Manitou Rapids	Manitou Rapids	"	John Jackson	" "
Moose Lake	Moose Lake	Pas	Thomas Bear	" "
Muckle's Creek	St. Peter's	Clandeboye	Miss H. McKenzie	" "
Pas	Pas	Pas	T. H. P. Lamb	" "
‖Pine Creek	Pine Creek	Manitowapah	Rev. A. Chaumont	Roman Catholic
Poplar River	Poplar River	Berens River	Joseph Dargue	Methodist
Red Earth	Red Earth	Pas	Nathan Settee	Church of England
Rossville	Norway House	Berens River	Joseph H. Lowes	Methodist
Sandy Bay	Sandy Bay	Manitowapah	J. F. Girardeau	Roman Catholic
Shoal Lake	Pas Mountains	Pas	Louis Cochrane	Church of England
St. Peter's (North)	St. Peter's	Clandeboye	Miss Lizzie McLean.	" "
" (South)	"	"	" Isab. J. Jackson	" "
" (East)	"	"	Richard S. Cushing	Church of England
" (R. C.)	"	"	Miss Alice Genthon	Roman Catholic
The Dalles	Rat Portage	Rat Portage	Charles Clarke	Church of England
Wabigoon	Wabigoon	Savanne	Miss Amy Johns	" "
Waterhen River	Waterhen River	Manitowapah	I. H. Adams	Roman Catholic
Total, Manitoba				

*No return received for September quarter 1900. †Only one return received. ‡No returns received for March and June quarters, 1901. ‖ Day pupils at the boarding school.

SESSIONAL PAPER No. 27

STATEMENT—*Continued.*

which Returns have been Received) for the Year ended June 30, 1901.

Appropriation for Salary or Yearly Grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												Manitoba.
300 00	Voted	10	10	20	10	12	8	....	....	....	....	Assabasca.
300 00	"	29	20	49	21	41	4	1	3	....	....	Berens River.
300 00	"	13	13	26	14	11	10	4	1	....	....	Big Eddy.
300 00	"	8	2	10	6	3	3	3	1	....	....	Black River.
300 00	"	7	10	17	7	9	6	2	....	....	....	Brokenhead.
300 00	"	17	13	30	19	12	8	10	....	....	....	Chemawawin.
300 00	"	21	12	33	13	25	4	4	....	....	....	Couchiching.
300 00	"	13	3	16	9	9	4	3	....	....	....	Crane River.
300 00	"	9	17	26	17	16	7	3	....	....	....	Cross Lake.
300 00	"	8	8	16	10	10	6	....	....	....	....	Eagle Lake.
300 00	"	10	11	21	12	11	4	6	....	....	....	Ebb and Flow Lake.
300 00	"	6	12	18	9	9	2	2	....	5	....	Fairford (Upper).
300 00	"	17	16	33	21	21	12	....	....	....	....	" (Lower).
300 00	"	29	18	47	19	....	12	5	....	5	25	Fisher River.
300 00	"	11	7	18	7	10	1	4	3	....	....	Fort Alexander (Upper).
300 00	"	15	9	24	12	20	3	1	....	....	....	" " (R. C.)
300 00	"	14	10	24	5	22	2	....	....	....	....	Frenchman's Head.
300 00	"	12	10	22	14	12	8	2	....	....	....	Grand Rapids.
300 00	"	13	12	25	12	13	3	5	4	....	....	Hollowwater River.
300 00	"	11	11	22	13	18	4	....	....	....	....	Islington.
300 00	"	16	12	28	12	18	4	6	....	....	....	Jackhead.
300 00	"	8	12	20	13	11	9	....	....	....	....	Lac Seul (Canoe River.)
300 00	"	9	5	14	8	10	1	3	....	....	....	" (Treaty Point.)
300 00	"	16	11	27	12	23	4	....	....	....	....	Lake Manitoba.
300 00	"	19	11	30	18	19	7	3	1	....	....	Lake St. Martin.
300 00	"	7	4	11	4	5	2	4	....	....	....	Little Forks.
300 00	"	12	11	23	15	12	9	2	....	....	....	Little Saskatchewan.
300 00	"	5	9	14	6	5	3	1	3	2	....	Long Sault.
300 00	"	15	11	26	9	16	5	5	....	....	....	Manitou Rapids.
300 00	"	10	9	19	8	12	7	....	....	....	....	Moose Lake.
300 00	"	10	8	18	9	12	3	2	1	....	....	Muckle's Creek.
300 00	"	31	29	60	28	39	11	3	4	3	....	Pas.
$12 per c	"	8	17	25	18	11	7	4	3	....	....	Pine Creek.
300 00	"	30	16	46	21	20	9	11	6	....	....	Poplar River.
300 00	"	16	17	33	13	20	11	2	....	....	....	Red Earth.
300 00	"	20	32	52	27	45	5	2	....	....	....	Rossville.
300 00	"	9	16	25	14	16	8	1	....	....	....	Sandy Bay.
300 00	"	10	9	19	15	7	2	6	2	2	....	Shoal Lake.
300 00	"	13	15	28	11	10	3	12	3	....	....	St. Peter's (North.)
300 00	"	16	15	31	16	10	11	5	5	....	....	" (South.)
300 00	"	14	11	25	10	13	3	8	1	....	....	" (East.)
300 00	"	8	9	17	11	11	3	1	1	1	....	" (R. C.)
300 00	"	9	4	13	7	11	2	....	....	....	....	The Dalles.
300 00	"	12	14	26	10	12	4	6	4	....	....	Wabigoon.
$12 per capita	"	12	9	21	12	16	2	3	....	....	....	Waterhen River.
.....	.....	608	540	1148	577	668	246	145	46	18	25	Total, Manitoba

SCHOOL

Showing the Condition of Indian Day Schools in the Dominion (from

School.	Reserve.	Agency.	Teacher.	Denomination.
NORTHWEST TERRITORIES.				
Attakakoop..	Attakakoop.	Carlton	Louis Ahenakew	Church of England
*Big River	Kenemotayoos	"	James Dreaver	" "
Bull's Horn	Blood	Blood	L. F. Hardyman	" "
†Crowfoot	Blackfoot	Blackfoot	Rev. J. Riou, O.M.I.	Roman Catholic
Day Star	Day Star	Touchwood Hills	Sophia E. Smyth	Church of England
Goodfish Lake	Pakan	Saddle Lake	Vincent Smith	Methodist
‡Irene Training	At Fort Vermilion.	In Treaty No. 8.	A. S. White	Church of England
James Smith's	James Smith's	Duck Lake	Donald McDonald	" "
John Smith's	John Smith's	"	Miss Ethel Shipman	" "
Joseph's	Joseph's	Edmonton	Severe Callihoo	Roman Catholic
Keys	Keys	Pelly	Owen Owens	Church of England
Keeseekouse	Keeseekouse	"	W. A. Tucker	Roman Catholic
Lac la Ronge	Lac la Ronge	Carlton	Samuel Abraham	Church of England
Little Pine's	Little Pine's	Battleford	C. T. Desmarais	" "
Louis Bull's	Louis Bull's	Hobbema	Mrs. A. Goodhand	Methodist
*Meadow Lake	Meadow Lake	Carlton	P. H. Garnot	Roman Catholic
Mistawasis	Mistawasis	"	Miss Kate Gillespie	Presbyterian
Montreal Lake	Montreal Lake	"	J. R. Settee	Church of England
Oak River Sioux	Oak River	Birtle	J. Francis Cox	" "
Okanase	Okanase	"	R. C. McPherson	Presbyterian
Poundmaker's	Poundmaker's	Battleford	Victoria Arcand	Roman Catholic
Red Pheasant	Red Pheasant	"	Miss M. Willson	Church of England
Saddle Lake	Saddle Lake	Saddle Lake	Chas. W. Leonard	Methodist
Sampson's	Sampson's	Hobbema	Chas. C. German	"
Shoal River	Keys	Pelly	Rev. A. T. Norquay.	Church of England
Sioux Mission.	Near Prince Albert	"	Miss Annie Cameron	Presbyterian
St. Anthony's	Lesser Slave Lake Peace River Dis.	In Treaty No. 8.	Rev. D. Laferrière, O. M. I.	Roman Catholic
Sturgeon Lake	Twatt's	Carlton	Mrs. Alice Clarke	Church of England
Sweet Grass	Sweet Grass	Battleford	Miss H. M. Flemming	Roman Catholic
Thunderchild's (C.E.)	Thunderchild's	"	Philip McDonald	Church of England
Wabiscow Lake (C.E.)	At St. John's Mission, Wabiscow Lake	In Treaty No. 8.	Miss Eliza A. Scott	" "
" (R.C)	At St. Martin's Mission, Wabiscow Lake	" "	B. Henri Giroux, O. M. I.	Roman Catholic
White Cap Sioux	Moose Woods		Mrs. W. R. Tucker	Methodist
Whitefish Lake	James Seenum's	Saddle Lake	Miss J. S. R. Batty	"
Total, N.W.T				

*Only one return received. †Day pupils at the boarding school. ‡No return received for September quarter, 1900.

STATEMENT.—*Continued.*

which Returns have been received) for the Year ended June 30, 1901.

Appropriation for Salary or Yearly Grant.	From what Fund paid.	Number on Roll.			Average Attendance	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												Northwest Territories
300 00	Voted	7	9	16	9	11	1	2	1	1	....	Attakakoop.
300 00	"	3	4	7	1	7	....	....	....	....	....	Big River.
300 00	"	12	11	23	11	23	....	....	....	....	....	Bull's Horn.
$12 per capita	"	13	8	21	10	19	2	....	....	....	....	Crowfoot.
300 00	"	7	7	14	12	5	3	3	3	....	....	Day Star.
300 00	"	16	9	25	15	17	5	1	2	....	....	Goodfish Lake.
300 00	"	4	7	11	9	10	1	....	....	....	....	Irene Training.
300 00	"	14	11	25	7	22	2	1	....	....	....	James Smith's.
300 00	"	6	8	14	6	10	2	2	....	....	....	John Smith's.
300 00	"	14	6	20	9	17	3	....	....	....	....	Joseph's.
300 00	"	3	11	14	7	8	3	3	....	....	....	Keys.
300 00	"	4	4	8	4	5	2	....	1	....	....	Keeseekouse.
300 00	"	11	15	26	12	23	3	....	....	....	....	Lac la Ronge.
300 00	"	4	10	14	7	10	3	1	....	....	....	Little Pine's.
300 00	"	5	3	8	4	5	....	3	....	....	....	Louis Bull's.
....	....	4	4	8	6	8	....	....	....	....	....	Meadow Lake.
300 00	Voted	11	4	15	7	12	2	1	....	....	....	Mistawasis.
300 00	"	10	8	18	11	6	10	2	....	....	....	Montreal Lake.
300 00	"	7	6	13	5	9	2	2	....	....	....	Oak River Sioux.
300 00	"	7	6	13	7	8	1	4	....	....	....	Okanase.
300 00	"	9	10	19	9	10	6	3	....	....	....	Poundmaker's.
300 00	"	11	10	21	12	15	2	3	1	....	....	Red Pheasant.
300 00	"	8	2	10	5	8	2	....	....	....	....	Saddle Lake.
300 00	"	11	11	22	5	21	....	1	....	....	....	Sampson's.
300 00	"	7	13	20	12	16	2	2	....	....	....	Shoal River,
300 00	"	6	5	11	7	5	4	1	1	....	....	Sioux Mission.
300 00	"	4	6	10	10	6	1	3	....	....	....	St. Anthony's.
300 00	"	12	5	17	3	16	1	....	....	....	....	Sturgeon Lake.
300 00	"	2	4	6	2	3	1	2	....	....	....	Sweet Grass.
300 00	"	7	3	10	5	6	4	....	....	....	....	Thunderchild's (C.E.)
300 00	"	8	14	22	12	12	5	4	1	....	....	Wabiscow Lake (C.E.)
300 00	"	7	5	12	12	3	5	4	....	....	....	" (R:C.)
300 00	"	5	7	12	8	1	5	2	3	1	....	White Cap Sioux.
300 00	"	6	11	17	9	16	1	....	....	....	....	Whitefish Lake.
.....	.....	265	257	522	270	373	84	50	13	2	....	Total, N.W.T.

SCHOOL

Showing the Condition of Indian Day Schools in the Dominion (from

School.	District.	Teacher.	Denomination.
OUTSIDE TREATY LIMITS.			
Albany Mission	Moosonee diocese, James bay	Robert J. Renison	Church of England
Herschel Island	McKenzie River district	W. D. Young	" "
Moose Fort	Moosonee diocese, James bay	T. Bird Holland	" "
Moosehide	Klondike, Yukon district	Rev. Benjamin Totty	" "
Nelson House	Keewatin district	Miss Sara A. Kitchen	Methodist
Providence Mission (Sacred Heart)	Athabasca and McKenzie Riv. diocese.	Sister St. Elzear	Roman Catholic
St. David's Mission	Fort Simpson, McKenzie Riv. district.	James R. Lucas	Church of England
St. Matthew's Mission	Fort McPherson, Peel River, McKenzie River district	Miss A. McDonald	" "
St. Peter's Mission	Hay River, McKenzie River district	Alex. J. Willson	" "
York Factory	Hudson bay, Moosonee diocese	Rev. R. Faries	" "
Total, Outside Treaty			

SESSIONAL PAPER No. 27

STATEMENT—*Continued.*

which Returns have been Received) for the Year ended June 30, 1901.

Appropriation for Salary or Yearly Grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
$ cts.												Outside Treaty Limits.
200 00	Voted	25	26	51	33	29	12	5	3	2	....	Albany Mission.
200 00	"	18	7	25	15	5	12	7	1	...	....	Herschel Island.
200 00	"	34	45	79	41	79	..	...	....	....	....	Moose Fort.
.....	.....	12	14	26	11	26	...	....	..	....	....	Moosehide.
.....	.....	5	9	14	8	14	..	....	...	...	....	Nelson House.
200 00	Voted	8	15	23	21	7	9	4	2	1	....	Providence Mission. (Sacred Heart.)
200 00	"	3	8	11	6	1	1	3	....	....	....	St David's Mission.
200 00	"	8	10	18	12	....	3	11	4	....	....	St. Matthew's Mission.
200 00	"	23	20	43	24	30	12	....	....	1	....	St. Peter's Mission.
200 00	"	8	5	13	10	4	3	4	2	....	....	York Factory.
... .	.....	144	159	303	181	201	52	34	12	4	....	Total, Outside Treaty.

SCHOOL

SHOWING the Condition of Indian Boarding

School.	Situation.	Principal.	Denomination.
ONTARIO.			
Fort William Orphanage....	At Fort William.....	Sister M. Ignatia....	Roman Catholic...
BRITISH COLUMBIA.			
Alberni.....	At Alberni, Tsesaht reserve, West Coast.	James R. Motion....	Presbyterian .....
Alert Bay Girls' Home.....	At Alert Bay, Nimkish reserve...	Rev. A. W. Corker..	Church of England
Clayoquot	Adjoining Opitsat, No. 1 reserve, West Coast agency	Rev. P. Maurus.....	Roman Catholic...
Port Simpson Girls' Home...	At Port Simpson, Northwest Coast.	Miss Lavinia Clarke.	Methodist .....
St. Mary's.....	At St. Mary's Mission, on the Fraser river.....	Rev. J. Tavernier, O.M.I.....	Roman Catholic...
Squamish	At Squamish, Fraser River agency.	Sister Mary Amy....	" ..
Yale (All Hallows)	At Yale, on the Fraser river.....	Amy, Sister Superior	Church of England
Total, British Columbia..	.....	....	.....
MANITOBA.			
Norway House.....	At Norway House, Berens River agency.....	E. F. Hardiman....	Methodist .....
Pine Creek..	At mouth of Pine creek, Lake Winnipegosis	Rev. A. Chaumont..	Roman Catholic...
Portage la Prairie..... ...	At Portage la Prairie, Man.....	Miss Annie Fraser..	Presbyterian .....
Rat Portage.....	At Rat Portage, Ont.....	Rev. C. Cahill, O.M.I	Roman Catholic...
*Waterhen River	On Waterhen River bay, Manitowapah agency.....	I. H. Adam	" ..
Total, Manitoba	....	....	.....
NORTHWEST TERRITORIES.			
Birtle	At Birtle, Man.....	Wm. J. Small	Presbyterian .....
Blood C.E.....	On Blood reserve, Blood agency ..	Arthur DeB. Owen..	Church of England
" R.C.....	" " " ..	Rev. L. Doucet, O.M.I	Roman Catholic...
Blue Quills	Blue Quill's reserve, Saddle Lake agency.....	Rev. H. Grandin....	" ..
Crowfoot.....	On Blackfoot reserve.	Rev. J. Riou, O.M.I.	" ..
Crowstand	Near Coté's reserve, Pelly agency..	Rev. Neil Gilmour ..	Presbyterian .....
Cowesess'.....	On Cowesess' reserve, Crooked Lakes agency.....	S. Perrault.....	Roman Catholic...
Duck Lake	On Duck Lake reserve, Duck Lake agency..	R'v. M. J. P. Paquette, O.M.I	" ..
Emmanuel College..... .	At Prince Albert, Sask....	Rev. James Taylor..	Church of England
Ermineskin's.....	On Ermineskin's reserve, Hobbema agency	Rev. R. L. Dauphin, O.M.I	Roman Catholic...
File Hills.....	On File Hills reserve	Rev. W. H. Farrer..	Presbyterian .....
Gordon's..... .	On Geo. Gordon's reserve, Touchwood Hills agency.....	M. Williams.....	Church of England

*The Water Hen River boarding school was closed at the end of September quarter, 1900, and pupils transferred to Pine Creek. A day school will in future be conducted at Waterhen River.

SESSIONAL PAPER No. 27

STATEMENT—*Continued.*

Schools in the Dominion for the Year ended June 30, 1901.

Grant.	From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
												ONTARIO.
$500	Voted	9	23	32	25	13	10	4	3	2	....	Fort William Orphanage.
												BRITISH COLUMBIA.
25 pupils, $60 per cap.	"	26	15	41	34	15	11	10	1	4	...	Alberni.
10 " 60 "	"	....	12	12	9	....	3	2	2	3	2	Alert Bay Girls' Home.
50 " 60 "	"	25	19	44	39	9	10	22	3	....	....	Clayoquot.
20 " 60 "	"	....	45	45	43	10	11	14	6	4	....	Port Simpson Girls' Home.
60 " 60 "	"	29	42	71	69	8	26	21	10	6	...	St. Mary's.
50 " 60 "	"	14	14	28	27	18	8	2	....	....	....	Squamish.
35 " 60 "	"	....	27	27	23	2	4	6	9	4	2	Yale (All Hallows).
.. ..	.....	94	174	268	244	62	73	77	31	21	4	Total, British Columbia.
												MANITOBA.
50 pupils, $72 per cap.	Voted	30	29	59	56	28	20	8	3	....	....	Norway House.
55 " 72 "	"	27	38	65	58	32	7	12	8	6	....	Pine Creek.
20 " 72 "	"	12	11	23	20	11	3	5	2	2	...	Portage la Prairie.
30 " 72 "	"	11	19	30	30	20	5	5	....	...	...	Rat Portage.
15 " 72 "	"	1	14	15	15	4	5	6	....	....	.. .	*Waterhen River.
.....	.....	81	111	192	179	95	40	36	13	8	....	Total, Manitoba.
												NORTHWEST TERRITORIES.
40 pupils, $72 per cap.	Voted	14	28	42	39	20	6	13	3	....	....	Birtle.
50 " 72 "	"	32	25	57	52	11	11	7	14	14	....	Blood, C.E.
25 " 72 "	"	14	4	18	16	18	....	....	...	...	....	" R.C.
45 " 72 "	"	29	22	51	45	10	10	15	11	5	....	Blue Quills.
25 " 72 "	"	12	6	18	16	10	3	5	....	....	....	Crowfoot.
40 " 72 "	"	23	18	41	40	17	13	5	4	2	...	Crowstand.
20 " 72 "	"	10	10	20	20	15	4	1	...	....	....	Cowesess.
100 " 100 "	"	51	50	101	92	48	21	12	20	....	....	Duck Lake.
20 boys, $100 p. cap 32 " and girls, $72 "	"	33	26	59	44	8	12	15	16	4	4	Emmanuel College.
50 pupils, $72 per cap.	"	27	21	48	43	21	9	5	9	2	2	Ermineskin's.
15 " 72 "	"	8	8	16	14	8	1	....	6	1	....	File Hills.
30 " 72 "	"	14	17	31	30	9	....	11	11	....	...	Gordon's

SCHOOL

SHOWING the Condition of Indian Boarding

School.	Situation.	Principal.	Denomination.
N.W. TERRITORIES.—*Con.*			
Holy Angels	At Nativity Mission, Fort Chipewyan	Rev. Sis'r McDougall	Roman Catholic
Isle à la Crosse	At Isle à la Crosse, McKenzie River district	Rev. Sister Foisy	" "
Lesser Slave Lake C. E.	At Lesser Slave Lake, Peace River district	C. D. White	Church of England
" " " R. C.	At Lesser Slave Lake, Peace River district	Rev. C. Falher, O.M.I	Roman Catholic
Muscowequan's	On Muscowequan's reserve, Touchwood Hills agency	Rev. I. Jacob	" "
McDougall Orphanage	On Morley reserve, Stony agency	John W. Niddrie	Methodist
Old Sun's	On Blackfoot reserve	Rev. H. W. G. Stocken	Church of England
Onion Lake R. C.	On Seekaskootch reserve, Onion Lake agency	Rev. Cypr. Boulene, O.M.I	Roman Catholic
" C. E.	On Seekaskootch reserve, Onion Lake agency	Rev. J. R. Matheson	Church of England
Peigan C. E.	On Peigan reserve, Peigan agency	W. R. Haynes	" "
" R. C.	" " " "	Rev. L. J. Danis, O.M.I.	Roman Catholic
Round Lake	In Crooked Lakes agency	Rev. H. McKay	Presbyterian
Sarcee	On Sarcee reserve, Sarcee agency	Percy Stocken	Church of England
Smoky River (St. Augustine).	Near Peace River crossing, at mouth of Smoky river	Rev. Sister Sostène	Roman Catholic
St. Albert	At St. Albert Settlement, Alta	Rev. Sis'r Dandurand	" "
Thunderchild's	On Thunderchild's reserve, Battleford agency	Rev. H. Delmas, O.M.I	" "
White Eagle	On Blackfoot reserve	Rev. H. W. G. Stocken	Church of England
Total, N. W. T.			

SESSIONAL PAPER No. 27

STATEMENT—*Continued.*

Schools in the Dominion for the Year ended June 30, 1901.

Grant.	From what Fund Paid.	Number on Roll.			Average Attendance.	Standard.						School.
		Boys.	Girls.	Total.		I	II	III	IV	V	VI	
												Northwest Territories.
40 pupils, $72 p. cap.	Voted	19	20	39	39	29	5	5	....	....	....	Holy Angels.
12 " 72 "	"	6	11	17	17	....	4	11	2	....	....	Isle à la Crosse-
15 " 72 "	"	23	25	48	38	22	14	7	5	....	....	Lesser Slave Lake C. E.
40 " 72 "	"	25	16	41	41	20	6	10	5	....	....	" " " R. C.
30 " 72 "	"	18	12	30	30	15	5	9	1	....	....	Muscowequan's.
40 " 72 "	"	23	26	49	43	29	7	9	4	....	....	McDougall Orphanage.
20 " 72 "	"	....	16	16	14	12	1	3	....	....	....	Old Sun's.
50 " 72 "	"	32	26	58	51	19	13	10	6	6	4	Onion Lake R. C.
16 " 72 "	"	6	11	17	16	4	5	1	4	3	....	" C. E.
30 " 72 "	"	12	15	27	21	19	4	4	....	....	....	Peigan C. E.
20 " 72 "	"	9	17	26	23	12	8	6	....	....	....	" R. C.
40 " 72 "	"	17	13	30	25	12	6	8	....	4	....	Round Lake.
15 " 72 "	"	7	9	16	11	4	3	2	6	1	....	Sarcee.
15 " 72 "	"	7	12	19	18	9	10	....	....	....	....	Smoky River (St. Augustine).
80 " 72 "	"	38	40	78	73	24	23	16	10	5	....	St. Albert.
25 " 72 "	"	6	6	12	11	10	2	....	....	....	....	Thunderchild's.
25 " 72 "	"	25	....	25	23	11	9	1	4	....	....	White Eagle.
.....	...	540	510	1050	945	446	215	191	141	47	10	Total, N. W. T.

SCHOOL

SHOWING the Condition of Indian Industrial Schools in

School.	Situation.	Principal.	Denomination.	Grant.
ONTARIO.				
Mohawk Institute...	At Brantford.....	Rev. R. Ashton...	Undenominational	91 pupils at $60 p. capita
Mount Elgin " ..	At Muncey..... ..	Rev. W. W. Shepherd.	Methodist.....	100 " $60 " ..
Shingwauk Home...	At Sault Ste. Marie	Geo. Ley King.. ..	Church of England	100 " $60 " ..
Wikwemikong(Boys)	At Wikwemikong .	Rev. G. A. Artus.	Roman Catholic...	50 " $60 " ..
" (Girls)	" ..	" "	" " ..	50 " $60 " ..
Total, Ontario...	....	.....	.....	....
BRITISH COLUMBIA.				
Alert Bay	At Alert Bay on Nimkish reserve	Rev. A. W. Corker	Church of England	35 pupils at $130 p. capita
Coqualeetza Home..	At Chilliwack Fraser River agency	Rev. J. Hall	Methodist.....	80 " $130 " ..
Kamloops	At Kamloops.....	Rev. A. M. Carion.	Roman Catholic...	50 " $130 " ..
Kootenay	At Kootenay.....	Rev. N. Coccola ..	" " ..	50 " $130 " ..
Kuper Island.	At Kuper Island, Cowichan agency	Rev. G. Donckele.	" " ..	50 " $130 " ..
Metlakahtla	At Metlakahtla, West Coast ag'cy	John R Scott.....	Church of England	25 boys at $140 " .. / 25 girls at $100 " ..
Williams Lake.....	At Williams Lake.	Rev. H. Boening..	Roman Catholic...	50 pupils at $130 " ..
Total, B.C	....	.....	.....	....
MANITOBA.				
Brandon..	At Brandon.....	Rev. T. Ferrier...	Methodist.....	100 pupils at $120 p. capita
*Elkhorn.	At Elkhorn.....	A. E. Wilson.	Undenominational	....
*Rupert's Land.....	At Middle Church.	James G. Dagg...	" " ..	.....
St. Boniface.....	At St. Boniface....	Rev. J. B. Dorais.	Roman Catholic...	110 pupils at $110 p. capita
Total, Manitoba.	....	....	.....	.....
NORTHWEST TERRITORIES.				
Battleford..	At Battleford, Sask.	Rev. E. Matheson.	Church of England	120 pupils at $145 p. capita
*Calgary.	At Calgary, Alta.	Rev. G. H. Hogbin	" " ..	.....
Qu'Appelle.	At Qu'Appelle, Assa	Rev. J. Hugonnard	Roman Catholic...	225 pupils at $125 p. capita
Red Deer.....	At Red Deer, Alta.	Rev. C. E. Somerset	Methodist.....	80 " $140 " ..
Regina.....	At Regina, Assa...	Rev. J. A. Sinclair	Presbyterian.....	125 " $130 " ..
St. Joseph's	At High River, Alta.	Rev M. Lépine OMI	Roman Catholic...	120 " $140 " ..
Total, N.W.T..	....	....	.....	.....

NOTE.—All boys at industrial schools are taught farming and all girls are taught sewing, knitting and
*All expenses paid by Government.

SESSIONAL PAPER No. 27

STATEMENT—*Concluded.*

the Dominion for the Year ended June 30, 1901.

From what Fund paid.	Number on Roll.			Average Attendance.	Standard.						Industries.									School.
	Boys.	Girls.	Total.		I	II	III	IV	V	VI	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Baker.	Harnessmaker	Printer.	Painter.	Engineer.	
																				ONTARIO.
Voted	60	71	131	121	10	37	30	30	10	14	1	..	..	..	..	..	..	..	..	Mohawk Institute
"	49	51	100	100	30	13	33	15	5	4	..	..	..	..	..	..	..	..	..	Mt. Elgin "
Vote &school f'd.	70	14	84	71	16	16	12	26	12	2	8	2	3	..	..	..	..	..	..	Shingwauk Home.
Voted	66	....	66	55	10	23	19	10	4	....	6	1	..	3	..	..	..	..	..	Wikwemikong (B)
"	....	53	53	51	23	....	16	8	6	....	..	..	..	..	..	..	..	..	..	" (Girls)
	245	189	434	398	89	89	110	89	37	20	15	3	3	3	..	..	..	..	..	Total, Ontario.
																				BRITISH COLUMBIA
Voted	21	....	21	19	....	9	8	3	1	....	20	..	..	..	..	..	..	..	..	Alert Bay.
"	67	42	109	85	29	15	21	22	6	16	..	5	..	..	4	..	..	2	..	Coqualeetza H'me
"	27	27	54	50	7	1	15	8	16	7	12	7	..	..	..	..	..	..	..	Kamloops.
"	32	25	57	53	15	3	14	11	11	3	..	2	..	..	..	..	..	..	..	Kootenay.
"	38	27	65	60	6	4	18	16	13	8	5	7	..	..	13	..	..	2	..	Kuper Island.
"	28	29	57	47	8	14	11	5	17	2	13	..	..	..	..	..	..	..	..	Metlakahtla.
"	21	29	50	50	9	10	11	11	9	...	2	..	..	..	..	4	..	..	..	Williams Lake.
	234	179	413	364	74	56	98	76	73	36	52	21	..	..	17	4	..	4	..	Total, B.C.
																				MANITOBA.
Voted	51	55	106	101	31	26	42	7	..	....	3	..	..	..	..	..	..	..	..	Brandon.
	52	31	83	58	28	16	25	6	8	....	6	6	..	..	1	1	1	..	..	Elkhorn.
	83	54	137	122	41	22	39	32	3	....	8	..	7	3	..	..	..	..	..	Rupert's Land.
V ted	56	36	92	87	22	22	24	19	4	1	3	..	..	..	..	..	..	..	..	St. Boniface.
	242	176	418	368	122	86	130	64	15	1	20	6	7	3	1	1	1	..	..	Total, Manitoba
																				NORTHWEST TERRITORIES.
Voted	55	44	99	97	23	20	22	18	15	1	5	..	..	2	3	..	1	..	..	Battleford.
	46	....	46	40	6	18	12	10	..	....	44	..	..	..	..	..	..	..	..	Calgary.
Voted	108	124	232	223	42	46	87	34	23	....	10	15	..	5	8	..	..	1	..	Qu'Appelle.
"	40	24	64	56	10	24	15	11	4	....	5	..	..	..	..	..	..	..	..	Red Deer.
"	68	52	120	92	31	27	21	21	20	....	6	..	..	..	3	..	5	..	1	Regina.
"	63	24	87	64	30	28	16	12	1	....	3	..	..	..	..	..	..	..	..	St. Joseph's.
	380	268	648	572	142	163	173	106	63	1	73	15	..	7	14	..	6	1	1	Total, N.W.T

geneaal household duties.

SUMMARY OF

Province.	Class of School.			Number of Schools.	Denomination.					Number on Roll.			Average Attendance.
	Day.	Boarding.	Industrial.		Undenominat'nl.	Roman Catholic.	Church of England.	Methodist.	Presbyterian.	Boys.	Girls.	Total.	
Ontario	74	1	5	80	35	25	9	11	....	1,466	1,201	2,667	1,459
Quebec	18	....	....	18	2	12	1	3	....	423	340	763	371
Nova Scotia	10	....	....	10	....	10	....	....	....	108	97	205	89
New Brunswick	6	....	....	6	....	6	...	....	....	75	68	143	74
Prince Edward Island	1	....	....	1	....	1	...	....	....	14	7	21	11
British Columbia	28	7	7	42	....	12	16	10	4	784	712	1,496	1,021
Manitoba	45	5	4	54	3	12	31	7	1	931	827	1,758	1,124
Northwest Territories	34	29	6	69	....	25	28	8	8	1,185	1,035	2,220	1,787
Outside Treaty Limits	10	....	....	10	....	1	8	1	....	144	159	303	181
Total	226	42	22	290	40	104	93	40	13	5,130	4,446	9,576	6,117

NOTE.—All boys at industrial schools are taught farming.

DEPARTMENT OF INDIAN AFFAIRS,
OTTAWA, June 30, 1901.

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SCHOOL STATEMENT.

Percentage of Average.	Standard.						Industries Taught.									Total.	Province.
	I	II	III	IV	V	VI	Carpenter.	Shoemaker.	Tailor.	Blacksmith.	Baker.	Harnessmaker.	Printer.	Painter.	Engineer.		
54·70	1,235	557	461	277	106	31	15	3	3	3	..	..	..	..	..	24	Ontario.
48·62	410	162	77	75	35	4	....	..	..	..	..	..	..	..	..	.....	Quebec.
43·41	102	32	29	29	10	3	....	..	..	..	..	..	..	..	..	.....	Nova Scotia.
51·74	69	25	19	16	7	7	....	..	..	..	..	..	..	..	..	.....	New Brunswick.
52·38	5	5	4	4	3	....	....	..	..	..	..	..	..	..	..	.....	Prince Edward Island.
68·61	583	301	305	163	103	41	52	21	..	..	17	4	..	4	..	98	British Columbia.
63·93	885	372	311	123	41	26	20	6	7	3	1	1	1	..	..	39	Manitoba.
80·49	961	462	414	260	112	11	73	15	..	7	14	..	6	1	1	117	Northwest Territories.
59·73	201	52	34	12	4	....	..	..	..	..	..	..	..	..	..	.....	Outside Treaty Limits.
58·18	4,451	1,968	1,654	959	421	123	160	45	10	13	32	5	7	5	1	278	.....Total.

INDIAN LAND STATEMENT

SHOWING the number of acres of Indian Lands sold during the year ended June 30, 1901, the total amount of purchase money, and the approximate quantity remaining unsold at that date.

PROVINCE OF ONTARIO.

Town or Township.	County or District.	Number of acres of Land sold.	Amount of Sales.	Approximate Quantity remaining unsold.	Remarks.
		Acres.	$ cts.	Acres.	
Albemarle	Bruce	500·00	300 00	214·00	
Amabel	"	200·00	100 00	68·00	
Eastnor	"	204·00	80 00	844·00	
Lindsay	"	130·00	31 00	3,642·00	
St. Edmund	"			4,267·00	
Bury (Tn. Plot)	"	23·60	392 00	783·16	
Hardwicke (Tn. Plot)	"			1,111·00	
Oliphant "	"			40·09	
Southampton "	"			21·75	
Wiarton "	"	2·05	74 00	23·45	
Brooke	Grey	2·50	72 41	3·00	
Keppel	"			2,210·60	
Saugeen Fishing Islands	Lake Huron			880·50	
Cape Hurd Islands	Georgian Bay			7,720·50	
Mississagi	Algoma District	883·34	883 34		
Thessalon	"	471·50	453 96	2,433·98	
Thessalon (town)	"	17·79	491 25	42·26	
Aweres	"	80·00	40 00	13,504·00	
Archibald	"			2,900·00	
Dennis	"	1,003·00	501 50	1,530·00	
Fisher	"			9,209·00	
Herrick	"	234·00	117 00	7,033·53	
Havilland	"			3,422·00	
Kars	"			9,459·00	
Apaquosh (Tn. Plot)	"	0·37	3 34	315·86	
Laird	"	80·00	49 60	7,905·48	
Macdonald	"	107·00	53 50	2,320·18	
Meredith	"			6,998·10	
Duncan	"			14,258·00	
Kehoe	"	371·00	241 15	16,486·00	
Thompson	"	713·73	804 69	928·58	
Cobden	"	1,536·41	1,571 32	255·37	
Pennefather	"	995·00	497·50	16,976·00	
Tilley	"			12,691·00	
Tupper	"			2,800·00	
Fenwick	"	530·00	265 00	11,773·00	
Vankoughnet	"	85·50	42 75	9,818·00	
Shingcouicouse (Tn. Plot)	"			269·00	
Bidwell	Manitoulin Distr't.	100·00	27 00	6,474·00	
Howland	"	300·00	105 00	4,751·00	
Sheguiandah	"	165·00	33 00	8,943·00	
Sheguiandah (Tn. Plot)	"	0·93	37 20	328·36	
Billings	"	198·00	142 90	5,019·00	
Assiginack	"	844·00	315 70	6,275·00	
Campbell	"	100·00	20 00	7,924·00	
Manitowaning (Tn. Plot)	"	17·28	369 60	14·02	
Carnarvon	"	529·00	235 80	11,126·00	
Tehkummah	"	800·00	450 00	6,434·90	
Sandfield	"	300·00	100 65	8,313·00	
Shaftesbury (Tn. Plot)	"	5·20	260 00	185·53	
Tolsmaville "	"	35·62	74 50	1,528·59	
Allan	"	765·00	295 80	4,423·00	
Burpee	"	810·00	188 65	10,300·00	
Barrie Island	"	1,129·00	241 95	2,217·00	
Gordon	"	204·00	41 40	3,927·00	
Gore Bay (Town Plot)	"	9·66	150 00	4·34	
Mills	"	518·00	108 80	6,415·00	
Cockburn Island	"	4,722·00	2,341 00	31,240·00	
Dawson	"	2,000·00	581 65	20,723·00	
Robinson	"	6,950·00	2,242 20	34,065·00	

SESSIONAL PAPER No. 27

INDIAN LAND STATEMENT showing the Number of Acres of Indian Lands sold during the Year ended June 30, 1901, &c.—*Concluded.*

PROVINCE OF ONTARIO.—*Concluded.*

Town or Township.	County or District.	Number of acres of Land sold.	Amount of Sales.	Approximate Quantity remaining unsold.	Remarks.
		Acres.	$ cts.	Acres.	
Neebing	Thunder Bay district	.....	.....	3,778·00	
Sarnia (Tn. Plot)	Lambton	0·90	375 00	.....	
Cayuga (village)	Haldimand	31·32	138 22	144·34	
Cayuga	"	.....	.....	312·60	
Dunn	"	.....	.....	1,571·50	
Caledonia (Tn. Plot)	"	.....	.....	53·94	
Brantford	Brant	.....	.....	135·85	
Bronte (Tn. Plot)	Halton	.....	.....	4·70	
Port Credit (Tn. Plot)	Peel	.....	.....	·25	
Deseronto (town)	Hastings	·78	1,856 25	6·51	
River St. Lawrence	Prov. of Ontario	·25	190 00	259·46	
Otonabee River and Lakes	Peterborough	4·79	65 00	2,048·91	
White Cloud Island	Georgian bay	38·96	95 50	72·88	
Sultana Island	Rainy River dist.	.....	.....	421·12	
Shannonville (Tn. Plot)	Hastings	·13	10 00	2·27	
Lake Ontario	Prov. Ontario	480·00	1,200 00	.....	
Kenyon	Glengarry	158·74	253 87	.....	
Parry Island	Georgian bay	92·50	1 00	.....	
Islands in Georgian Bay	Georgian bay	22·00	120 00	.....	Survey not completed.
Alnwick Reserve	Northumberland	1·11	380 00	·70	
Michipicoten Reserve	Algoma district	.....	.....	1,481·50	
		29,504·96	20,112 95	366,081·76	
PROVINCE OF QUEBEC.					
Ouiatchouan	Chicoutimi	334·43	133 78	4,909·05	
Coleraine	Megantic	1,654·00	5,076 00	.....	
Dundee	Huntingdon	422·53	1,056 26	7,274·35	
Viger	Temiscouata	.....	.....	48·00	
Maniwaki (Tn. Plot)	Wright	4·79	224 75	86·37	
Temiscamingue	Pontiac	294·40	147 20	20,618·07	
		2,710·15	6,627 99	32,935·84	
NORTHWEST TERRITORIES.					
Papaschase	Alberta	293·00	1,098 75	.....	
Sharphead	"	8,212·30	17,285 29	8,847·79	
Chacastapasin	Saskatchewan	.....	.....	15,906·38	
		8,505·30	18,384 04	24,754·17	
MANITOBA.					
Gambler's Reserve	Manitoba	.....	.....	8,629·60	
St. Peter's Reserve	"	.....	.....	847·69	
		.....	.....	9,477·29	

General Remarks.

The land sold during the year amounted to 40,720·41 acres which realized $45,134.98. The quantity of surrendered land in the hands of the department was, approximately, 433,249 acres. The principal outstanding, on account of Indian Lands sold, amounted to $152,560.87, a considerable portion of which has not yet become due

SCHEDULE OF INDIAN RESERVES IN THE DOMINION

NOVA SCOTIA.

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
		Victoria County.			
	Middle River	At the mouth of the Wagamatchook or Middle River.	Micmac	650·00	Transferred to the Dominion by the Provincial Government at Confederation.
		Inverness County.			
2	Whycocomagh	On the north shore and near the head of Whycocomagh basin.	"	1,555·00	" " "
4	Malagawatch	At the entrance of the St. Denis river basin.	"	1,200·00	" " "
25	Marguerite River	At the mouth of the Marguerite river.	"	2·00	" " "
26	Port Hood	Near Port Hood	"	Not surveyed.	" " "
		Cape Breton County.			
3	Escasoni	In St. Andrew's township, on the north side of St. Andrew's channel.	"	2,800·00	" " "
28	Sydney	In Sydney harbour, one mile from Sydney.	"	2·73	Granted to the Dominion for the purposes of an Indian reserve by the province, April 28, 1882.
29	Cariboo Marsh	On the Movia road, five miles from Sydney	"	536·00	" " "
		Richmond County.			
5	Chapel Island	On the north shore of Great Bras d'Or lake.	"	1,281·00	Transferred to the Dominion by the Provincial Government at Confederation.
		Digby County.			
6	Bear River	On the Bear river, partly in Digby and partly in Annapolis counties.	"	1,600·00	" " "
		Annapolis County.			
7	Cegumcega Lake (north of boundary.)	On the boundary between Annapolis and Queen's counties.	"	400·00	" " "
8	New Liverpool Road	On the New Liverpool road, about seven miles from Annapolis.	"	572·00	Transferred to the Dominion by the Provincial Government at Confederation. Surveyed in August, 1894.
		Queen's County.			
9	Cegumcega Lake (south of boundary).	On the boundary between Queen's and Annapolis counties.	"	615·00	Transferred to the Dominion by the Provincial Government at Confederation.

10	Ponhook Lake	At the outlet of Ponhook lake	Micmac	200·00	" " "
14	Port Medway River	On the Port Medway river, one-quarter of a mile from Port Medway lake.	"	10·00	" " "
12	Wild Cat	Near the mouth of Wild Cat creek, between Malaga lake and Port Medway river.	"	1,150·00	" " "
		Halifax County.			
13	Grand Lake	On the west shore of Grand lake, near the boundary between Halifax and Hants counties.	"	1,000 00	Transferred to the Dominion by the Provincial Government at Confederation. Surveyed in March, 1887.
15	Sambro	Between Sambro basin and Long cove, Sambro harbour.	"	300·00	Transferred to the Dominion by the Provincial Government at Confederation.
16	Ingram's River	At the mouth of Ingram's river, St. Margaret's bay.	"	325·00	" " "
17	Beaver Lake	At Beaver lake, on the road from Sheet Harbour to Musquodoboit.	"	100·00	" " "
18	Ship Harbour Lake	On the northeastern shore of Ship Harbour lake.	"	500·00	" " "
30	Minister's Lake (Cow Bay or Coal Harbour).	At Minister's lake, on the Caldwell road between Coal Harbour and the Eastern Passage.	"	43·75	Purchased by the Department of Indian Affairs, Aug. 20, 1880.
		Hants County.			
14	Indian Brook or Shubenacadie.	On Indian brook, in the township of Douglas.	"	1,790·00	Transferred to the Dominion by the Provincial Government at Confederation.
		Lunenburg County.			
19	Pennall's Reserve	Near New Ross, at the west end of Wallaback lake.	"	100·00	" " "
19A	New Germany	At Lake Peter, on the eastern branch of the Lahave river.	"	953·00	Transferred to the Dominion by the Provincial Government at Confederation. Surveyed and subdivided in 1880.
20	New Ross	At Nine Mile lake, about seven miles north of New Ross.	"	1,000·00	Transferred to the Dominion by the Provincial Government at Confederation.
21	Gold River	In two portions, containing 960 and 81 acres respectively, situated near the head of Malone bay, Chester basin.	"	1,041·00	" " "
		Pictou County.			
24	Fisher's Grant Reserves.	At the head of Moodie cove, on the south side of the entrance to Pictou harbour.	"	50·00	" " "
24A		At Boat Harbour	"	73·00	Purchased by the Dominion Government December 7, 1874. The reserve then contained 89 acres. On June 28, 1876, 16 acres were cut off and given in exchange for 24B.

SCHEDULE of Indian Reserves in the Dominion—*Continued.*

NOVA SCOTIA.—*Concluded*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
24 B		Lies between and adjoining 24 and 24A....	Micmac	11·00	The lot referred to above, received in exchange for 16 acres cut off 24A.
24 C		East of and adjoining 24A.....	"	30·00	Purchased by the Department of Indian Affairs December 1, 1888.
31	Chapel Island (A).....	In Merigomish harbour. Island A contains approximately 30 acres and Island B 5 acres.	"	Not surveyed.	Reserved for the use of the Indians prior to Confederation, with the understanding that they may be resumed again if required by Her Majesty's Government. F. 25421.
31 A	Mooley's Island (B).....				
		Cumberland County.			
22	Franklin Manor	Adjoins the Franklin Manor, about five miles southwest of Amherst.	"	1,000·00	Transferred to the Dominion by the Provincial Government at Confederation.
		Antigonish County.			
23	Pomquet and Afton Reserves.	Near Pomquet harbour...	"	525·00	" " "
		Colchester County.			
27	Millbrook	On the east side of the Intercolonial railway, at an arch culvert over the Mill brook, in the township of Truro.	"	35·00	Purchased by the Department of Indian Affairs, December 6, 1886. F. 25421.
		King's County.			
32	Cambridge or Cornwallis..	Situated at Cambridge, in the township of Cornwallis.	"	9·99	Purchased by the Department of Indian Affairs, February 19, 1880.
		Yarmouth County.			
33	Yarmouth.....	On the eastern side of Starr's road, near the town of Yarmouth.	"	21·19	Purchased by the Department of Indian Affairs, November 5, 1887.
		PRINCE EDWARD ISLAND.			
1	Lennox Island.....	At the northwest extremity of Richmond or Malpeque bay.	Micmac	1,320	Transferred to the Dominion Government at Confederation.

2	Morell	On the Morell river, in township No. 39	"	204	Granted about the year 1846 by a private owner to certain eight Indian families. Subsequently, April 7, 1859, the tract was conveyed by the Provincial Government to the then Indian Commissioners and their successors in office in trust for the Indians. F. 4,217.

NEW BRUNSWICK.

Northumberland.

1	Indian Point	In the parish of Northesk, on the left bank of the northwest Miramichi river, and nearly opposite the mouth of the Little Miramichi river.	Micmac, Red Bank band.	100	Transferred to the Dominion Government at Confederation. The reserve originally contained about 750 acres ; of this area 650 acres were subdivided and sold prior to Confederation.
2	Eel Ground	In the parish of Northesk, on the left bank of the northwest Miramichi river, and near its confluence with the main southwest Miramichi river.	Micmac, Eel Ground band.	2,682	Transferred to the Dominion Government at Confederation.
4	Red Bank	In the parish of Southesk, on the right bank on the Little southwest Miramichi river and at its confluence with the northwest Miramichi river.	Micmac, Red Bank band.	3,797	Transferred to the Dominion Government at Confederation. The reserve originally contained about 6,100 acres. Two portions are reserved for the use of the Indians containing 3,330 and 467 acres respectively. The remainder has been subdivided and is being sold for the benefit of the Indians. F. 107,222 No. 2.
7	No name (Part of the Red Bank Reserve)	On the left bank of the Little southwest Miramichi river opposite No. 4.	" "	2,353	Transferred to the Dominion Government at Confederation. The reserve originally contained about 5,000 acres. Two portions are reserved for the use of the Indians containing 2,288 and 65 acres respectively. The remainder has been subdivided and is being sold for the benefit of the Indians.
8	Big Hole Tract.	In the parish of Northesk, on the left bank of the northwest Miramichi river, opposite the mouths of the Big and Little Sevogle rivers.	Micmac. The north half belongs to the Red Bank band ; the south half to the Eel Ground band.	6,303	Transferred to the Dominion Government at Confederation. The reserve originally contained 6,800 acres. Five lots containing together 497 acres were sold prior to Confederation.
9	Tabusintac	In the parish of Alnwick, on both sides of the Tabusintac river and about five miles from its mouth.	Micmac	8,077	Transferred to the Dominion Government at Confederation. About one-half the reserve was subdivided, and eight lots containing together 1,169 acres were sold prior to Confederation. F. 107,222 No. 7.
12	Renous	On the right bank of the southwest Miramichi river, about half a mile above the mouth of the Renous river.	Micmac, Eel Ground band.	100	Transferred to the Dominion Government at Confederation.
14	Burnt Church	At the mouth of Burnt Church river, on the northwest shore of Miramichi bay.	Micmac	2,058	Transferred to the Dominion Government at Confederation.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

NEW BRUNSWICK—*Continued.*

	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
		Restigouche.			
3	Eel River	In the parish of Dalhousie, at the mouth of the Eel river and on its left bank.	Micmac	220	Transferred to the Dominion Government at Confederation.
		York.			
6	Indian Village (Kingsclear).	In the parish of Kingsclear, on the right bank of the River St. John.	"	460	Transferred to the Dominion Government at Confederation.
22	St. Croix	In the parish of Dumfries, on the east bank of the First Chiputneticook lake and near the mouth of the Little Digdeguash river.	Amalecite	200	Set apart and vested in the Department of Indian Affairs by Order in Council of the province of New Brunswick dated December 12, 1881. F. 4,252.
24	St. Mary's	In the parish of St. Mary's directly opposite the city of Fredericton.	"	2½	Purchased by the Dominion Government, June 20, 1867. Nos. 175 and 206 Book of Surrenders.
		Madawaska.			
10	St. Basil Edmonstun	On the left bank of the River St. John, near the mouth of the Madawaska river.	"	722	Transferred to the Dominion Government at Confederation.
		Victoria.			
20	Tobique	In the parish of Perth, on the left bank of the River St. John, at the mouth of the Tobique river.	"	5,766	Transferred to the Dominion Government at Confederation. The reserve originally contained 18,500 acres approximately. The land reserved for the use of the Indians consists of a small tract containing 81 acres situated at the mouth of the Tobique river, on its south bank and nearly the whole of the land lying north of the same river. The remainder of the reserve has been subdivided and is being sold for the benefit of the Indians.
		Gloucester.			
11	Pabineau	In the parish of Bathurst, at the mouth of the Pabineau river, on the left bank of the Nepisinquit river.	Micmac	1,000	Transferred to the Dominion Government at Confederation.
25	Indian Island	In Nepisinquit bay opposite the town of Bathurst.	Micmacs of Bathurst	16	Purchased by the Dominion Government, Nov. 26, 1895. No. 371. F. 132,215.
13	Pockmouche	In the parish of Inkerman, on the right bank of the Pockmouche river, about seven miles from its mouth.	Micmac	2,477	Transferred to the Dominion Government at Confederation.

		Kent.			
15	Richibucto	On the left bank of the Richibucto river, about eight miles from its mouth.	Micmacs, Big Cove band.	2,202¾	Transferred to the Dominion Government at Confederation. The reserve originally contained about 5,720 acres. Two-thirds of it was subdivided and a number of lots sold prior to Confederation. F. 13,145.
16	Buctouche	On the left bank of the Buctouche river, about three miles from its mouth.	Micmac		Transferred to the Dominion Government at Confederation.
27	Indian Island Reserve	A point on the main land at the mouth of Gaspereau creek, opposite Richibucto island in Richibucto harbour.	"		A 'Special Reserve,' held by deed from J. C. Vanlour to the Roman Catholic Bishop of St. John for the use of the Indians. F. 132,215.
		Westmoreland.			
27	Fort Folly	On the left bank of the Petitcodiac river, due west of the town of Dorchester.	"	62½	Purchased by the Provincial Government and deeded to and held in trust by the Magistrates of the county of Westmoreland for the use of the Micmac Indians, Aug. 15, 1840. F. 61,747.
		King's.			
18	The Brothers	Two small islands near the south shore of Kennebecasis bay.	"	10	Transferred to the Dominion Government at Confederation.
		Charlotte.			
19	Canons River	In the parish of St. James, at the mouth of the Canons river, on the left bank of the Cheputneticook river.	Amalecite	100	Transferred to the Dominion Government at Confederation.
		Carleton.			
23	Woodstock	On the right bank of the River St. John, about two miles south of Woodstock.	"	200	Purchased May 22, 1851, by the Provincial Government, for the use of the Amalecite tribe of Indians at the Maductic. No. 281.
		Sunbury.			
26	Oromocto	In the parish of Burton, on the right bank of the River St. John.	"	125	Purchased by the Dominion Government, Sept. 12, 1895.
		QUEBEC.			
1	Restigouche	At the mouth of the Restigouche river, adjacent to the west boundary of the township of Mann, county of Bonaventure.	Micmac	8,869·42	This reserve is a portion of the area of land set apart and appropriated under the statute 14 and 15 Victoria, chapter 106, for the benefit of the Indian tribes in Lower Canada. The total area of land set apart by the statute amounted to 230,000 acres.
2	Maria	At the mouth of the Grand Cascapedia river, in the township of Maria, county of Bonaventure.	"	416·00	Settled on and claimed by the Indians from time immemorial.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

QUEBEC—*Continued.*

No.	Name.	Where situated.	Tribe or Band.	Area, Acres.	Remarks.
3	Betsiamits	At the mouth of the Betsiamits river, on the north shore of the St. Lawrence river, in the county of Saguenay.	Montagnais, Tadousacs, Papinachois, Nauthapi and other nomadic tribes.	63100·00	A portion of the area set apart under the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
5	Ouiatchouan	On the west shore of Lake St. John, in the county of Chicoutimi.	Montagnais of Lake St. John and Tadousac.	3779·06	Originally consisted of the entire township, containing 23,000 acres, set apart under the provisions of the Act 14 and 15 Vic., chap. 106. The whole township, with the exception of the present reserve, has been surrendered, and is being sold for the benefit of the Indians.
7	Lorette	In the county of Quebec, about eight miles from the city.	Hurons of Lorette	26·75	This village, which is said to have contained an area of 40 arpents, had been long occupied by the Hurons. They were confirmed in possession by a deed of gift from the Jesuit Fathers, dated 26th February, 1794. The boundaries were defined by order of the courts in 1887.
8	Quarante Arpents	In the county of Quebec, about three miles from Lorette.	" "	1352·00	Gift from the Jesuit Fathers, dated 7th March, 1742, and again confirmed in the deed of gift of 26th February, 1794, mentioned above.
9	Rocmont	In the township of Rocmont, county of Portneuf.	" "	9600·00	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
10	Crespieul	West of the township of Crespieul, in the county of Lake St. John.	Abenakis	8374·85	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
11	Becancour	Near Becancour, in the county of Nicolet. The reserve consists of lot No. 582, in the concession du Village Sauvage, and Islands Nos. 574, 488 and 489, in the Becancour river.	Abenakis of Becancour	148·63	These Indians were once the proprietors of the seignory of Becancour, granted to them April 30, 1708. In 1760 they sold the whole of their territory, except the lot and islands which now constitute their reserve.
12	Pierreville	At Pierreville, in the county of Yamaska. Consists of the following lands situated in the seigniories of Pierreville and St. François du Lac, viz.: Cadastral No. — Arp. Per. 1217: Pierreville Reserve — 1,228·00 1218: 2nd con. St. Jacques or No. 1 on the especial plan — 85·20	Abenakis of St. Francis	1538·50	Two large grants of land in Pierreville and St. Francis were made in 1700 and 1701 to these Indians by private parties. The present reserve is all they now possess, the whole of the remainder having been leased or otherwise conceded to whites.

		1219: 3rd con. St. Jacques or No. 24 on the especial plan. 90·00 880: a part of Ronde island.. 280·00 850: a small island lying between Atcombac and Au Pin island.. ..... 0·14 874: parts of an island opposite Pierreville reserve 11·81 875..... 9·62 482: 3rd con. parish of St. Francis or No. 41 on the especial plan..... 114·75 972: a lot in the village of Pierreville ..... 1·40 Total arpents..... 1,820·92			
14	Caughnawaga.....	On the south bank of the St. Lawrence river, in the county of Laprairie.	Iroquois of St. Louis..	12625·17	Part of a grant made in 1680 to the Jesuits for the conversion, instruction and subsistence of the Iroquois. The title was vested in the Iroquois under the supervision of the Indian Department, April 15, 1762, by judgment of Military Council assembled at Montreal.
15	St. Regis.....	On the south bank of the St. Lawrence river, in the township of Dundee, county of Huntingdon. The reserve consists of the following lands: St. Regis village and reserve..... 605·00 Lots in Dundee, purchased in 1892. 731·98 Lots in Dundee, purchased in 1897. 102·89 Cadastral list of islands.....1,527·05 Islands in the St. Lawrence reported on by agent John Davidson, not included in the cadastral list...3,919·83 6,886·75	Iroquois of St. Regis..	6886·75	This reserve is a part of the hunting grounds of the Iroquois, which were in their possession at the time of the French rule in this country.
17	Doncaster.....	The southerly portion of the township of Doncaster, in the county of Montcalm.	Iroquois of Sault St. Louis and Lake of Two Mountains.	18500·00	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
18	Maniwaki.....	At the confluence of the Desert river with the Gatineau river, in the county of Ottawa.	Algonquins of the Lake of Two Mountains.	44708·66	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
19	Temiscaming	At the head of Lake Temiscaming in the county of Pontiac.	Temiscaming band Ottawas and Algonquins.	15590·00	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
21	Whitworth.....	Lots 27, 28 and 29, concession 12, township of Whitworth, county of Temiscouata.	Amalecites of Isle Verte and Viger.	399·00	Purchased by the Department of Indian Affairs, March 31, 1877.
22	Cacouna.....	Lot No. 66, shown on the cadastral plan of the village of Cacouna, county of Temiscouata.	Amalecites of Isle Verte and Viger.	0·44	Purchased by the Department of Indian Affairs, July 8, 1891.
23	Weymontaching.....	On the north side of the St. Maurice river, opposite the mouth of the Manouan river, county of Champlain.	Algonquins and Tête de Boule.	7407·95	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)

SCHEDULE of Indian Reserves in the Dominion—*Continued*

QUEBEC—*Concluded.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
24	Coucoucache.....	On the north side of the St. Maurice river, opposite the mouth of the outlet from Lake Coucoucache, county of Champlain.	Algonquins and Tête de Boule.	380·00	Set apart under the provisions of the Act 14 and 15 Vic., chap. 106. (*See* No. 1.)
25	Escoumains.....	Near the mouth of the Escoumains river, township of Escoumains, county of Saguenay.	Montagnais	97·00	Purchased in 1892 by the Department of Indian Affairs.

ONTARIO.

1	Maganettawan.....	On the River Maganettawan	Ojibbewas of Lake Huron.	8,670	Reserved under the provisions of the Robinson Huron Treaty, September 9, 1850; subsequently surveyed and confirmed by O. C., January 31, 1853.
2	Henvey Inlet.....	At Henvey inlet, on Georgian bay.....	" " ..	24,930	Robinson Huron Treaty. (*See* note to No. 1.)
3	Point Grondin.....	At Point Grondin, north shore of Lake Huron.	" " .	10,100	" "
4	Whitefish River.....	At the mouth of Whitefish river, north shore of Lake Huron.	" " ..	10,600	" " The reserve originally consisted of 20,120 acres. In 1867 the north part of the reserve, containing 9,520 acres, was surrendered.
5	Spanish River.....	At the mouth of Spanish river, north shore of Lake Huron.	" " ..	28,000	Robinson Huron Treaty. (*See* note to No. 1.)
6	Whitefish Lake.....	At Whitefish lake, about 16 miles north of Collins' inlet, north shore of Lake Huron.	" " ..	43,755	Set apart under the provisions of the Robinson Huron Treaty. The reserve was not surveyed until 1884. The boundaries as then surveyed were amended and established by judgment of the court of January 21, 1889. (Attorney General of Ontario *vs.* Francis, *et al.*)
7	Serpent River.....	The peninsula east of the mouth of Serpent river, north shore of Lake Huron.	" " ..	27,480	Robinson Huron Treaty. (*See* note to No. 1.)
8	Mississagi River.....	At the mouth of Mississagi river, north shore of Lake Huron.	" " ..	5,636	" "
9	Dokis.....	On French river	" " ..	30,300	" "
10	Nipissing	On the north shore of Lake Nipissing.....	" " ..	80,640	" "
11	Wanapitae	At Lake Wanapitae.....	" " ..	2,560	Set apart under the provisions of the Robinson Huron Treaty. Not confirmed by the Provincial Government.
12	Thessalon.....	At the southeast corner of the township of Thessalon, north shore of Lake Huron.	" " ..	2,307	Robinson Huron Treaty. The reserve originally consisted of the entire township, all of which except the present reserve, has been surrendered for sale for the benefit of the Indians. (*See* note to No. 1.)
13	French River.....	At Ogawaning, on French river.....	" " ..	4,560	Robinson Huron Treaty. "

14	Garden River	At Garden river, near Sault Ste. Marie	" "	24,126	Robinson Huron Treaty. The reserve originally consisted of a tract containing about 130,000 acres, all of which, except the present reserve, has been surrendered for sale for the benefit of the Indians. (*See* note to No. 1.)
15A	Goulais Bay	At Batchewaung bay, east end of Lake Superior.	" "	1,595	The original reserve contained about 157,440 acres, was set apart under the Robinson Huron Treaty, subsequently surveyed and finally confirmed by O. C., January 31, 1852. It was surrendered for sale for the benefit of the Indians, in 1859. The present reserve at Goulais bay is a portion of the original reserve set apart by Orders in Council in 1879 and 1885.
15B	Whitefish Island	At Sault Ste. Marie	" "	20	Robinson Huron Treaty. Part of the 15th reservation.
16	Parry Island	In Georgian bay, near its eastern shore	" "	19,000	Under the provisions of the Robinson Huron Treaty the reserve was located on the mainland. The island was surveyed in lieu of that location, and the survey approved by the Commissioner of Crown Lands November 22, 1853.
17	Shawanaga	In the township of Shawanaga, Parry Sound district.	" "	8,475	Robinson Huron Treaty. (*See* note to No. 1.)
17A	Naiscoutaing	In the townships of Wallbridge and Harrison, Parry Sound district.	" "	2,650	" "
17B		Lots 34 and 35, concession 7, township of Shawanaga, Parry Sound district.	Shawanaga band of Ojibbewas of Lake Huron.	178	Vested by Order in Council of the Provincial Government, dated December 31, 1877, in the Dominion Government in trust for the Shawanaga band of Indians so long as the said band continues to occupy the said lots.
18	Temogaming	At Lake Temogaming	A band of Ojibbewas of Lake Huron who had not been provided with a reserve under the provisions of the Robinson Huron Treaty.	64,000	Surveyed in 1884. This reserve has not been confirmed by the Provincial Government of Ontario.
19	Cockburn Island	On Cockburn island, Lake Huron	Ottawas and Chippewas of Lake Huron.	864	The Manitoulin islands and islands on the north shore of Lake Huron were set apart, August 9, 1836, by Sir Edmund Head, as a reserve for the Ottawas and Chippewas and any other Indians who should be allowed to settle thereon.
20	Sheshegwaning	In the tp. of Robinson, Manitoulin island	" "	5,000	
21	Obidgewong	" tps. of Mills and Burpee " "	" "	732	
22	West Bay	" tp. of Billings, Manitoulin island	" "	8,399	
23	Sucker Creek	" " Howland " "	" "	1,665	The Manitoulin and adjacent islands were surrendered for sale for the benefit of the Indians October 6, 1862, and under the provisions of this surrender the present reserves, numbered 19 to 26 inclusive, were set apart.
24	Sheguiandah	" " Sheguiandah " "	" "	5,106	
25	Sucker Lake	" " Assiginack " "	" "	599	
26	Manitoulin Island (unceded portion).	The eastern peninsula of " "	" "	105,300	
27	Cape Croker	Saugeen peninsula	" "	15,586	The Saugeen peninsula was set apart as an Indian reserve August 9, 1836, by Sir Edmund Head, and surrendered for sale for the benefit of the Indians, October 13, 1854. Reserves Nos. 27, 28 and 29 were set apart under the provisions of the said surrender of October 13, 1854.
28	Chief's Point	" "	" "	1,280	
29	Saugeen Reserve	At the southwestern corner of the Saugeen peninsula.	" "	9,020	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

ONTARIO—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
29 A	Hunting Reserve.....	In the township of St. Edmund.....	Chippewas of Saugeen and Cape Croker.	3,800	Set apart from unsold Indian lands by Order in Council of November 19, 1896, as hunting grounds for the Chippewa bands of Saugeen and Cape Croker. F. 160,542.
30	Christian Islands, viz.:—Christian, Hope and Beckwith.	In Lake Huron.....	Chippewas of Lake Couchiching, Simcoe and Huron.	13,300	These islands were reserved in the surrender made by these Indians, June 5, 1856, of the islands situated in Lake Huron which they claimed. The islands in Lake Huron claimed by these Indians were ceded in error in 1850 by the Ottawas and Chippewas of Lake Huron.
31	Gibson or Watha.....	The eastern portion of the township of Gibson, Muskoka district.	.....	25,582	Purchased from the Provincial Government in 1881 for such members of the Oka band of Indians as might desire to settle there.
32	Rama.....	In the township of Rama, county of Ontario.	Chippewas of Lakes Couchiching, Simcoe and Huron.	2,000	Purchased from private parties at different dates between 1843 and 1848.
33	Georgina Island.....	Georgina, Snake and Fox islands in Lake Simcoe, and other islands in Lake Couchiching.	Chippewas of Lakes Couchiching, Simcoe and Huron.	3,574	These islands have remained in the possession of the Indians, and have never been ceded by them by treaty or purchase.
34	Scugog.....	On the island in Lake Scugog.....	Mississaguas of Scugog	800	Purchased by these Indians with the proceeds of their own annuities, November 3, 1843.
35	Mud Lake.....	On Mud lake, in the township of Smith, county of Peterborough.	Mississaguas of Mud Lake.	1,548	Granted in 1837 to the New England Company. Transferred to the Dominion Government in trust for the Indians, October 12, 1898, less a portion containing 115·64 acres reserved by the company.
36	Rice Lake.....	On the north shore of Rice lake, in the county of Peterborough.	Mississaguas of Rice Lake.	1,860	1,120 acres of this reserve was granted in 1834 to trustees for the benefit of Indian tribes in the province. The remainder of the reserve was purchased by the Indians with their own funds.
36 A	Islands in the Trent waters.	In the counties of Peterborough and Victoria.	Mississaguas of Rice, Mud and Scugog lakes.	.....	Claimed by these Indians not to have been included in treaty of 1818, and claim subsequently admitted by the Crown Lands Department.
37	Alnwick.....	In the township of Alnwick, county of Northumberland.	Mississaguas of Alnwick.	3,282	Purchased from private owners at different dates between 1836 and 1870.
37 A	Sugar Island.....	In Rice lake, in front of the 4th and 5th concessions of Otonabee.	Mississaguas of Alnwick.	100	Purchased for the Alnwick Indians by deed from Wm. Kempt, dated January 13, 1899, for $775, from their funds.
38	Tyendinaga.....	On the bay of Quinté—the southern part of the township of Tyendinaga.	Mohawks of the bay of Quinté.	18,600	The reserve consisted originally of 92,700 acres granted under letters patent from the Crown in 1793, all of

					which, except the present reserve, has been surrendered and sold and the proceeds applied for the benefit of the Indians. Salmon island and marshes were added by Order in Council, November 13, 1900. F. 78,703.
39	Golden Lake	At the southern end of Golden lake, in the county of Peterborough.	Algonquins of Golden lake.	1,560	Purchased by the Dominion Government from the Government of Ontario in 1870 as a reserve for these Indians.
40	Tuscarora	The township of Tuscarora and parts of the townships of Oneida and Onondaga.	The Six Nations, consisting of the Mohawks, Oneidas, Onondagas, Tuscaroras, Cayugas, Senecas and Delawares.	49,696	A tract six miles wide on each side of the Grand river, was granted to the Six Nations in 1784 by Sir F. Haldimand, containing about 694,910 acres. This grant was confirmed to them by letters patent in 1793 by Governor Simcoe. All of the tract, except the present reserve, has been surrendered in portions from time to time and sold for the benefit of the Indians. In 1847 the Six Nations invited the Mississaguas of the Credit to settle on their reserve, and offered them a free grant of 6,000 acres for the purpose. A number accepted, who now reside in the southwest corner of the reserve.
41	Oneida	In the township of Delaware, county of Middlesex.	Oneidas of the Thames.	4,620	Purchased for these Indians by the Government in 1840 with their own money which they brought with them from the United States.
42	Caradoc	In the township of Caradoc, county of Middlesex.	Chippewas of the Thames and Munsees	10,800	Reserved by the Chippewas in the cession made by them of the 'Longwood Tract' in 1819. A small portion of the reservation was surrendered in 1834 and sold for the benefit of the Indians.
43	Stony Point or Aux Sables.	In the township of Bosanquet, county of Lambton.	Chippewas of Chenail Ecarté and St. Clair.	2,555	Reserved by these Indians in the cession of a large tract in the London and Western districts made by them in 1827.
44	Kettle Point	" "	" " ..	2,224	" " "
45	Sarnia	In the township of Sarnia, county of Lambton.	" " ..	4,943	" " "
46	Walpole Island	At the head of Lake St. Clair	Chippewas and Pottawattamies of Walpole island.	40,480	The Chippewas settled on the island in 1831 by order of the Government. The island appears to have been then set apart by the Government as a Crown reserve to be used for the purpose of settling Indians thereon. The Pottawattamies came from the United States in 1841, and, on petition, were permitted by the Government to settle on the island.
47	Orford	In the township of Orford, county of Kent.	Moravians of the Thames.	3,010	The reserve originally consisted of 51,160 acres, situated in the townships of Zone and Orford, and was set apart by Order in Council in 1793. All the reservation, except the present reserve, has been surrendered and sold for the benefit of the Indians.
48	Michipicoten	On the Michipicoten river, about one mile from its mouth.	Ojibbewas of Lake Superior.	178	Surveyed in 1885 for the Indians who resided on the land. This reserve has not been confirmed by the Provincial Government.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

ONTARIO—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
49	Gros Cap	On the north shore of Lake Superior, about a mile west of Michipicoten river.	Ojibbewas of Lake Superior.	10,180	Set apart in accordance with the provisions of the Robinson Superior Treaty.
50	Pic River	On the Pic river, near its mouth	" "	800	Surveyed in 1885 for the Indians who resided on the land. These reserves have not been confirmed by the Provincial Government.
51	Pays Plat	At Pays Plat, north shore of Lake Superior.	" "	605	" " "
52	Fort William	Near the west end of Lake Superior	" "	14,500	Set apart under the provisions of the Robinson Superior Treaty.
53	Red Rock	On Nipigon river	" "	468	Surveyed in 1885 for the Indians who resided on the land. Not confirmed by the Provincial Government.
54	McIntyre Bay	On the south shore of Lake Nipigon	" "	585	Surveyed in 1885 for the Indians of Lake Nipigon. Not confirmed by the Provincial Government.
55	Gull River	At the mouth of Gull river, on the west shore of Lake Nipigon.	" "	9,825	Set apart under the provisions of the Robinson Superior Treaty. Surveyed in 1887. Not confirmed by the Provincial Government.
56	Island Point	On the west shore of Lake Nipigon.	" "	135½	Surveyed in 1885 for the Indians of Lake Nipigon. These reserves have not been confirmed by the Provincial Government.
57	Jackfish Island	A small island near the west shore of Lake Nipigon.	" "	Not surveyed.	" " "
58	Long Lake	At the north end of Long lake.	" "	612	Surveyed in 1886 for the Indians residing on the land. Not confirmed by the Provincial Government.
59	Cornwall Island	In the River St. Lawrence near the boundary between Ontario and Quebec.	Iroquois of St. Regis	2,050	This and adjacent islands form part of the reserve of these Indians held by them from the time French rule began in this country.
60	Saugeen Indians' hunting ground	Lots 11 to 20, inclusive, in concessions III and IV; lots 11 to 18 and lot 20 in concessions I and II, all east of the Bury road, township of St. Edmund, county of Bruce.	Saugeen and Cape Croker bands.	3,800	Set apart by Order in Council of November 16, 1896. Lots 11, 12, 13, 14, 15, 16, 17, 18 and 20, in concessions I and II, E. B. R., are set apart for the Saugeen reserve Indians, and lots 11 to 20, inclusive, in concessions III and IV, E. B. R., for the Cape Croker band.

SCHEDULE of Indian Reserves in the Dominion—*Continued.*

TREATY No. 3—ONTARIO—*Continued.*

No.	Name.	Area, Acres.	Locality.
10	Little Forks	1,920·13	Rainy river.
11	Manitou Rapids	5,736·50	"
12	Long Sault No. 2	5,046·75	"
13	" 1	6,366·73	"
14	'The Bishop,' Hungry Hall No. 1	3,982·66	"
15	'Paskonkin,' Hungry Hall No. 2	2,300·94	"
15M	Wild Lands Reserve	20,671·27	"
16A	Rainy Lake	100·00	Rainy lake.
16D	"	11,200·00	"
41	Agency Rerserve, Fort Frances	170·00	"
17A	Rainy Lake (Niacatchewenin)	3,761·50	"
17B		2,439·75	Clear Water lake.
18B		4,586·88	Rainy lake.
18C		3,861·76	"
21	English River or Grassy Narrows	10,244·00	English river.
21	Wabaskang	8,042·00	Wabaskang Lake.
22 A1	Lac des Mille Lacs	3,750·70	Lac des Mille Lacs.
22 A2	Seine River	8,476·70	Seine river.
23	Sturgeon Falls	6,825·20	"
23A	Seine River	2,003·20	"
23B	"	2,234·80	"
24C	Kawaiagamot (Sturgeon Lake)	5,948·30	Sturgeon lake.
25D	Neguaquon Lake (Lac la Croix)	15,355·30	Lac la Croix.
26A	Rainy Lake (Nickickonesemenecanning)	4,850·00	Rainy lake.
26B	" "	2,640·00	"
26C	" "	2,737·00	"
27	Wabigoon Lake	12,872·00	Wabigoon lake.
27	Eagle Lake	8,882·00	Eagle lake.
28	Lac Seul or Lonely Lake	49,000·00	Lac Seul.
29	Islington	20,954·00	Winnipeg river.
29	Swan Lake	3,277·00	Swan Lake.
29	One Man's Lake	668·00	English river.
30	Agency Reserve (Sabaskasing)	640·00	Lake of the Woods.
31A	Naongashing	1,280·00	"
31B	Lake of the Woods	726·00	"
31C	"	800·00	"
31D	Big Island	915·00	"
31E	"	1,920·00	"
31F	"	Not surveyed.	"
31G	Lake of the Woods	275·00	"
31H and pt. of 31G.	Big Island	1,541·00	"
31J	Shoal Lake	1,280·00	Shoal lake.
32A	Whitefish Bay	4,865·20	Lake of the Woods.
32B	Yellow Girl Bay	4,454·30	"
32C	Sabaskong Bay	1,280·00	"
33A	Whitefish Bay	3,091·00	"
33B	Northwest Angle	3,299·00	"
34	Lake of the Woods	641·00	"
34A	Whitefish Bay	1,529·20	"
34B	Shoal Lake, 1st Part	640·00	Shoal lake.
34B	" 2nd Part	426·00	"
34C	Northwest Angle	1,261·80	Northwest Angle River, in Manitoba.
34C	" "	750·00	Lake of the Woods.
35A	Naongashing	1,280·00	"
35B	Obabikong	1,760·00	"
35C	Sabaskong Bay	1,9 0·00	"
35D	"	1,280·00	"
35E 1	Little Grassy River, 1st Part	640·00	"
35E 5	Lake of the Woods, 2nd Part	Not surveyed.	"
35F	Sabaskong Bay	1,280·00	"
35G	Big Grass River	8,960·00	"
35H	Sabaskong Bay	640·00	"
35J	Lake of the Woods	3,481·60	"

SCHEDULE of Indian Reserves in the Dominion—*Continued.*

TREATY No. 3—ONTARIO—*Concluded.*

No.	Name.	Area, Acres.	Locality.
36	Buffalo Point	5,763·00	Lake of the Woods, in Manitoba.
37	Big Island	1,946 00	" "
37	Rainy River	3,687·00	Rainy river.
37A	Shoal Lake	1,920·00	Shoal lake, in Manitoba.
37B	Northwest Angle (Approx.)	840·00	Lake of the Woods.
37B	Lake of the Woods	262·00	"
37C	Northwest Angle River	690·00	Northwest Angle river, in Manitoba.
38A	Near Rat Portage	8,000·00	Lake of the Woods.
38B	" "	5,289·90	"
38C	The Dalles, near Rat Portage	8,064·00	Winnipeg river.
38D	Lake of the Woods	Not surveyed.	Certain islands in Lake of the Woods.
39	West Shore Shoal Lake	1,031·00	Partly in Manitoba.
39	Northwest Shore Shoal Lake	8,415·00	"
40	" "	6,759·00	"
39 40	Islands in "	Not surveyed.	"

INDIAN Reserves in Manitoba and the Northwest Territories.

TREATY No. 1.

		Area, Square Miles.	
1	St. Peters	80·00	St. Andrew's and St. Clement's, Manitoba.
2	Roseau River	20·86	Franklin, Manitoba.
2A	" Rapids	1·25	" "
3	Fort Alexander	31·84	Nepahwin and Powassin, Man.
4	Brokenhead River	21·90	St. Clement's, Manitoba.
5	Sandy Bay, Lake Manitoba	19·00	Westbourne.
6	Long Plain, Assiniboine River	16·90	Portage la Prairie and South Norfolk, Man.
7	Swan Lake, not surveyed	Approx. 15·06	Lorne, Man.
8	Hamilton's Crossing	1·00	South Norfolk, Man.

TREATY No. 2.

43	Big Jackhead, Lake Winnipeg	4·20	Winnipegosis, Man.
44	Fisher River, Lake Manitoba	21·00	Norquay, Man.
45	Waterhen River "	7·20	Winnipegosis, Man.
46	Dog Creek "	14·80	Patterson, Man.
48	Sandy Bay, Lake St. Martin	5·00	"
49	The Narrows "	6·30	"
50	Fairford, Lakes St. Martin and Manitoba	18·30	"
51	Crane River, Lake Manitoba	12·40	"
52	Ebb and Flow "	16 90	"
57	Birdtail Creek, Assiniboine River	10·75	Archie and Miniota, Man.
58	Oak River "	15·20	Woodworth, Man.
59	Oak Lake, Pipestone Creek	4·00	Pipestone "
60	Turtle Mountain	1·00	Winchester "
61	Riding Mountain House	8·75	Strathclair "
61A	Clear or Clearwater Lake	1·15	Riding Mountain, Man.
.....	Temporary hay lands, S.W. ¼ 20, 20, 21 W.I.M.	·25	" "
62	Waywayseecappo, Birdtail Creek	39·00	Birdtail Creek & Rossburn, Man.
62A	Fishing Station, sec. 24, 20, 20 W.I.M	·49	Rossburn, Man.
63	The Gambler	1·21	Ellice, Man.
63A	Valley River	18·25	Gilbert Plains, Man.
66A	Pine River, Lake Winnipegosis	14·30	Roseberry, Man.
67	Rolling River	20·00	Harrison "
68	Moose Mountain, Pheasant Rump	.....	Surrendered. F. 69,244.
69	" Ocean Man	.....	
70	" White Bear	44·90	Tps. 9 and 10, rgs. 2 and 3, W. of 2nd I. M. Assiniboia.

SCHEDULE of Indian Reserves in the Dominion—Manitoba and Northwest Territories—*Continued.*

TREATY No. 4.

No.	Name.	Area, Square Miles.	Locality.
64	Gabriel Côté	56·50	Near Fort Pelly, Assiniboia.
65	The Key	38·00	" "
65 A	Dawson Bay, Mouth of Shoal River	1·50	Lake Winnipegosis, Manitoba.
65 B	" Steep Rock Point	3·55	" "
65 C	Swan Lake, Woody and Birch Rivers	3·03	Swan lake "
65 D	Dawson Bay, Dog Island	0·43	Lake Winnipegosis "
65 E	" ½ mile west of Shoal River	0·08	" "
66	Keeseekoose	28·60	Near Fort Pelly, Assiniboia.
.....	Hay lands	11·00	" "
71	Kakeesheway (Round Lake)	82·60	Round lake.
72	Kakewistahaw	73·00	Qu'Appelle riv., between Round and Crooked lakes, Assiniboia.
72 A	" fishing grounds	0·15	Crooked lake "
73	Cowesess	78·00	" "
73 A	Little Bone	10·90	Crescent lake "
74	Sakimay	33·90	Crooked lake "
74 A	Shesheep	5·60	" "
75	Piapot	53·98	Qu'Appelle river "
75 A	Hay lands	4·48	" "
76	'Carry the Kettle' or 'The man-who-took-the-coat'	73·21	Indian Head "
78	Standing Buffalo	7·60	Qu'Appelle lake "
79	Pasquah Fishing Lakes	60·15	Near Qu'Appelle "
80	Muscowpetung	59.50	" "
80 A	Fishing Grounds at Long Lake	2·23	Little Arm river "
80 B	Hay lands, Muscowpetung and others	·72	Near Qu'Appelle "
81	Peepeekeesis	41·60	File hills "
82	Okanase	22·36	" "
83	Star Blanket	21·50	" "
84	Little Black Bear	46·50	" "
85	Muscowequan	36 00	Little Touchwood hills "
86	George Gordon	48·00	" "
87	Day Star	24 00	Big Touchwood hills "
88	The Poor Man	42·50	" "
89	Yellow Quill	34·50	Fishing lake "
90	"	16·17	Nut Lake, Saskatchewan.
.....	Regina Industrial School	0·50	Regina, Assiniboia.
.....	Qu'Appelle "	1 37	Qu'Appelle "

TREATY No. 5.

9	Black River	3·10	Lake Winnipeg, Manitoba.
10	Hole or Hollowwater River	5·20	" "
11	Loon Straits	1·77	" "
12	Blood Vein River	5·20	" "
13	Berens River	11·50	" "
14	Little Grand Rapids, Berens River	8·75	Crow lake, Manitoba.
15	Pekangekum	3·50	Lake Pekangekum, Keewatin.
16	Poplar River	5·90	Lake Winnipeg "
17	Norway House	16·70	Norway House "
19	Cross Lake	10·90	Nelson river "
20	Cumberland House	6·29	Pine Island lake, Saskatchewan.
21	The Pas	10·00	The Pas "
21 A	Indian Pear Island	2·00	" "
21 BtoK	For Pas Band	2·70	" "
27	Birch River	8·40	Saskatchewan river "
28 A	Shoal Lake	3·50	Carrot river "
29	Near Red Earth	4·23	" "
29 A	Red Earth	3·19	" "
31 A	Moose Lake	0·70	Moose lake "
31 B	"	0·23	" "
31 C	"	4·40	"

SCHEDULE of Indian Reserves in the Dominion—Manitoba and Northwest Territories.—*Continued*

TREATY No. 5—*Concluded.*

No.	Name.	Area, Square Miles.	Locality.
31 D	Moose Lake	4·27	Moose lake, Saskatchewan.
31 E	"	0·31	" "
32	Chemawawin	4·75	Cedar lake "
33	Grand Rapids, Saskatchewan River	7·26	Lake Winnipeg "

TREATY No. 6.

94	'Moose Woods' Chief White Cap	5·80	S. Saskatchewan river, Assiniboia.
94 A	Wahspaton	3·75	Prince Albert, Saskatchewan.
95	One Arrow	16·00	Near Batoche. "
96	Okemassis		
97	Beardy	44·00	Near Fort Carlton "
99	Muskoday or John Smith	37·40	South of Prince Albert "
100	James Smith or Fort à la Corne	27·80	Fort à la Corne "
100 A	Carrot River for Cumberland Indians	65·00	" "
101	Sturgeon Lake	34·40	N.W. of Prince Albert "
102	Paddling or Muskeg Lake	42·00	West of Prince Albert "
103	Mistawasis	77·00	Snake plain "
104	Ahtahkakoop's	67·17	Sandy lake "
105	Flying Dust	14·00	Meadow lake "
106	Montreal Lake (Wm. Charles)	23·00	Montreal lake "
106 A	Wm. Charles and James Roberts	56·50	Little Red river "
108	Red Pheasant	38·00	Near Battleford "
109	Mosquito	36·00	" "
110	'Grizzly Bear's Head' and 'Lean Man'	36·20	" "
111			
112	Moosomin	23·00	" "
112 A	Hay lands for Bands 112 and 115	2·00	" "
113	Sweet Grass	61·13	" "
113 A	Strike-him-on-the-Back	3·32	" "
113 B	Hay lands for 113 and 113A	2·00	" "
114	Poundmaker	30·00	" "
115	Thunderchild	24·00	" "
115 A	"	8·50	" "
116	'Little Pine' and 'Lucky Man'	25·00	" "
118	Kenemotayoo Reserve	46·35	Stony and Whitefish lakes
119	Seekaskootch	60·00	Near Onion lake, Saskatchewan.
120	Makaoos	22·00	" "
121	Ooneepowhayoos	33·00	Frog lake "
122	Puskeeahkeewenin	40·00	" "
123	Keheewin	28·00	Long lake "
125	Pakan, Little Hunter and Blue Quill	115·00	Saddle lake
125 A	Cache Lake (adjoins 125)	14·00	" "
127	Blue Quill (included in 125)		
128	Pakan, Jas. Seenum	17·50	Whitefish lake "
132	Michel Callihoo	40·00	Near Edmonton "
133	Alexis	23 00	Lake Ste. Anne's near Edmonton, Saskatchewan.
133 A	White Whale Lake	32·70	Wabamun lake, near Edmonton, Saskatchewan.
133 B			
134	Alexander	41·00	Near Edmonton, Saskatchewan.
135	Tommy la Potac or Enoch	44·50	" "
136	Papaschase (sold)		" "
137	Samson	61·50	South of Edmonton "
138	Ermineskin	61·50	" "
138 A	Pigeon Lake (Fishing Reserve)	7·78	" "
139	Bobtail's	31·50	" "

SCHEDULE of Indian Reserves in the Dominion—Manitoba and Northwest Territories.—*Concluded.*

TREATY No. 7.

No.	Name.	Area, Square Miles.	Locality.
142	Bear's Paw (Stony)		
143	Jacob "	109·00	Near Morleyville, Alberta.
144	Chiniquay "		
145	Sarcee	108·00	Near Calgary "
146	Blackfoot	470·00	" "
147	Peigan	181·40	Near Macleod "
148	Blood	546·76	" "
A	Timber limit for 148 on Belly River	6·50	South of the Blood reserve, Alberta.
B	" 147	11·50	West of the Peigan reserve, Alberta.
C	" 146, Castle Mountain	26·50	West of the Rocky Mountain park, Alberta.
	Agency Reserve at Macleod	·003	Part of sec. 13, tp. 9, R. 26, W. of 4th M.

SCHEDULE of Indian Reserves in the Dominion.—*Continued*

YUKON DISTRICT.

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
2	Moosehide Creek.....	At the mouth of Moosehide creek, on the east shore of the Yukon river, about three miles below the town of Dawson.	The Indians of the locality.	160	Set apart by O. C. of March 27, 1900. Amended by O. C. of October 9, 1900, under which the tract occupied by the English church is excepted from the reservation. F. 153377.
1	Lake Laberge	At the upper end of Lake Laberge.	The Indians of the locality.	320	Set apart by O. C. of July 13, 1

BABINE AGENCY, BRITISH COLUMBIA.

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Blackwater.....	Cariboo district, on the right bank of Fraser river, ¾ mile above the mouth of the Blackwater river.	Blackwater.....	35	
2	Nahlquonate.....	Cariboo district, on the left bank of the Blackwater river, about one mile above the crossing of the trail from Quesnel to Stony creek.	"	217	Allotted by Commissioner O'Reilly, Oct. 6, 1892. Surveyed, 1894. Final confirmation, Sept. 21, 1895.
3	Ulkah	At foot of Bobtail lake, on the trail from Quesnel to Stony creek, Cariboo district.	"	157	
4	Umliisle.....	Cariboo district, at the foot of Eu-la-ta lake, on the trail from Quesnel to Stony creek.	....	128	
1	Fort George	Cariboo district, at confluence of Fraser and Nechaco rivers.	Fort George	1,366	
2	.....	Cariboo district, on Fraser river, 18 miles above Fort George.	.....	1,310	Allotted by Commissioner O'Reilly, Oct. 5, 1892. Surveyed, 1894. Final confirmation, Sept. 21, 1895.
3	Clesbaoneecheck..... ...	Cariboo district, on left bank of Nechaco river at Duck lake.	... .	304	
4	Salaquo	Cariboo district, on right bank of Nechaco river, at the mouth of Mud river.	....	115	
1	Natley	Coast district, on the left bank of the Nechaco river, at the foot of Fraser lake.	Fraser Lake.....	1,117	

2	....	Coast district, on the northern shore of Fraser lake and adjoining the western boundary of the Hudson's Bay Co.'s claim at Fort Fraser.	"	149	
3	Yensischuck.....	Coast district, one quarter mile north of the trail from Quesnel to Fort Fraser and about one mile east of the Nechaco Ferry.	"	160	Allotted by Commissioner O'Reilly, Sept. 2, 1892. Surveyed, 1894. Final confirmation, Dec. 14, 1895.
4	Seapunkut.....	Coast district, on the southern shore of Fraser lake, about 7 miles from Fort Fraser.	"	.....	
5	Stellaquo.....	Coast district, at the western extremity of Fraser lake and at the mouth of Stellaquo river.	"	2,077	
1	Lackalsap.....	Cassiar district, about 35 miles southeast of Hazelton, on the Hoquelget river.	Hoquelget.....	1,333	
2	Coryatsaqua.....	Cassiar district, on the trail to Hazelton, about two miles north of Lackalsap.	"	360	
3	Oschawwinna.....	Coast district, on the Fraser lake trail, about 5 miles south of Lackalsap.	"	160	Allotted by Commissioner O'Reilly, Sept. 19, 1891. Surveyed, 1899. Final confirmation, Feb. 26, 1900.
4	Clotalairquot	Cassiar district, on the right bank of the Babine river, 3 miles north of the Hudson's Bay Co.'s post on Babine lake.	"	198	
5	No-cut.....	Cassiar district, on the left bank of the Babine river, 2 miles north of the Hudson's Bay Co.'s post on Babine lake.	"	197	A small island in the Babine river is included in this reservation.
6	Babine	Cassiar district, at the outlet of Babine lake and north of and adjoining the Hudson's Bay Co.'s claim.	"	695	
7	Timber reserve..... ..	Cassiar district, on the western shore of Babine lake, due west of the Hudson's Bay Co.'s claim.	"	92	Allotted by Commissioner O'Reilly, Sept. 19, 1891. Surveyed, 1899. Final confirmation, Feb. 26, 1900.
8	Casdeded.....	Cassiar district, on the eastern shore of Babine lake, 1 mile south of the Hudson's Bay Co.'s claim.	"	107	
9	Tsak	Cassiar district, on the western shore of Babine lake, about 16 miles south of the Hudson's Bay Co.'s post.	"	1,520	
10	Net-saw-greece..... ...	Cassiar district, on the eastern shore of Babine lake, about 18 miles south of the Hudson's Bay Co.'s post.	"	226	
11	Ne-do-ats.....	Cassiar district, on the eastern shore of Babine lake, about 25 miles south of the Hudson's Bay Co.'s post.	"	977	Allotted by Commissioner O'Reilly, Sept. 19, 1891. Surveyed, 1899. Final confirmation, Feb. 26, 1900.
12	Timber reserve.....	Cassiar district, on the western shore of Babine lake, about 24 miles south of the Hudson's Bay Co.'s post.	"	336	
1	Hazelton	Cassiar at the forks of the Skeena river	Hazelton	2,704	Allotted by Commissioner O'Reilly, Sept. 29, 1891.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

BABINE AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
2a	Tsoo-gun-ya	Cassiar district, on Two Mile creek, 2½ miles northeast of Hazelton.	Hazelton	360	Allotted by Comm'r. Vowell, Aug. 15, 1898.
3	Tsitsk	Cassiar district, on the Hoquelget river, 2½ miles east of Hazelton.	"	443	" " " Sept. 29, 1891.
4	Anlaw	Cassiar district, on the left bank of the Skeena river, 2½ miles north of Hazelton.	"	284	" " " Sept. 29, 1891. Surveyed 1898. Final confirmation, April 24, 1899.
	Kisgegas	Cassiar district, on the Babine river, about four miles from its confluence with the Skeena.	Kisgegas	2,415	Allotted by Comm'r. Vowell, August 3, 1898. Surveyed 1898. Final confirmation, Aug. 26, 1899.
1	Kispiox	Cassiar district, about eight miles above Hazelton, and at the confluence of the Kispiox and Skeena rivers.	Kispiox	2,252	Allotted by Comm'r. O'Reilly, Sept. 26, 1891.
2	Sic-e-dach	Cassiar district, on the right bank of the Skeena river, about 3½ miles above Hazelton.	"	900	Allotted by Comm'r. Vowell, July 21, 1898. 272 inches of water recorded from Alipack creek.
3	A-gue-din	Cassiar district, on the Kispiox river, about three miles from its mouth.	"	560	Allotted by Comm'r. Vowell, August 5, 1898. These reserves have not been surveyed.
1	Kitseguecla	Cassiar district, on the Skeena river, about 11 miles below Hazelton.	Kitseguecla	1,850	Allotted by Comm'r. O'Reilly, Oct. 1, 1891.
2	New Kitseguecla	Cassiar district, on the Skeena river, about seven miles below Hazelton.	"	1,036	These reserves have not been surveyed.
3	Timber Reserve	Cassiar district, on the left bank of the Skeena, about five miles below Hazelton.	"	217	
1	Kitwangar	Cassiar district, on the banks of the Skeena at the mouth of Kitwangar river.	Kitwangar	2,694	
2	Timber Reserve	Cassiar district, on the left bank of the Skeena, about a mile above Reserve No. 1.	"	150	Allotted by Comm'r. O'Reilly, Oct. 2, 1891.
3	Squin-lix-stat	Cassiar district, on the right bank of the Skeena, about 10 miles below Kitwangar.	"	25	
4	Kwa-tsa-lix	Cassiar district, on the banks of the Skeena, about 22 miles below Kitwangar.	"	125	
5	Tum-bah	Cassiar district, on the left bank of the Skeena, about 2½ miles below Kitwangar.	"	147	These reserves have not been surveyed; the acreage is only approximate.
6	Kits-ka-haws	Cassiar district, on the right bank of the Skeena, about 5 miles below Kitwangar.	"	100	Allotted by Comm'r. O'Reilly, Sept. 16, 1893.
7	Koonwats	Cassiar district, on Skeena river, about 8 miles above Lorne creek.	"	185	
8	Chig-in-kaht	Coast district, on the right bank of the Skeena, about 1½ mile below Lorne creek.	"	103	

1	Kuldoe	Cassiar district, on the Skeena river, about seventy miles above Hazelton.	Kuldoe.	446	Allotted by Comm'r. Vowell, July 30, 1898. Surveyed 1898. Final confirmation, April 24, 1899.
1	McLeod	Cariboo district, at outlet of McLeod lake and adjoining the Hudson's Bay Co.'s land.	McLeod Lake.	286	Allotted by Comm'r. O'Reilly, Sept. 12, 1892. Surveyed 1894. Final confirmation, Dec. 27, 1895.
1	Necoslie	Coast district, at outlet of Stuart lake.	Necoslie	734	
2	Tat-sel-a-was	Coast district, on left bank of Stuart river, about 10 miles below Fort St. James.	"	136	
3	Sow-chea	Coast district, on southern shore of Stuart lake, about 9 miles from Fort St. James.	"	225	
4	Uz-ta	Coast district, on trail from Stuart lake to McLeod and about 5 miles from Fort St. James.	"	960	Allotted by Comm'r. O'Reilly, Sept. 30, 1892. Surveyed 1898. Final confirmation, January 11, 1899.
5	Aht-len-jees	Coast district, 6 miles southwest of Fort St. James.	"	300	
6	Chesda	Coast district, 8 miles southwest of Fort St. James.	"	360	
7	Kwot-ket-quo	Coast district, southwest of and adjoining reserve No. 6.	"	160	
1	Stony Creek	Coast district, on Stony creek, between Tachic and Noolki lakes.	Stony Creek	6,370	
2	Sack-a-ni-te-cla	Coast district, on eastern shore of Noolki lake.	"	200	
3	Lake-town	Coast district, on northern shore of Noolki lake, near its western end.	"	540	
4	Meadow reserve	Coast district, on the trail from Quesnel to Fraser lake, and about a mile west of reserve No. 3.	"	160	Allotted by Comm'r. O'Reilly, Aug. 29, 1892. Surveyed 1894.
5	Clus-ta-lack	Coast district, on the southern shore of Tachic lake, and about six miles from reserve No. 3, on the trail from Quesnel to Fraser lake.	"	103	Final confirmation, December 5, 1895.
6	Noon-la	Coast district, on the right bank of the Nechaco river, at the crossing of the trail from Stony creek to Stuart lake.	"	115	
1	Thatce	Coast district, on the northern shore of Stuart lake, at the mouth of Thatce river.	Thatce	1,655	
2	Pintce	Coast district, on the northern shore of Stuart lake, at the mouth of Pintce river.	"	728	
3	Nan-cut	Coast district, on Stuart lake, at the mouth of the Yi-ko river, and on the Portage from Stuart to Babine lake.	"	372	Allotted by Comm'r. O'Reilly, Sept 27, 1892. Surveyed 1898.
4	U-caus-ley	Coast district, at the outlet of Petit lake, about four miles from reserve No. 3.	"	445	Final confirmation, January 11, 1899.
5	Car-soo-at	Coast district, on the northern shore of Stuart lake, about half-way between reserves Nos. 1 and 3.	"	124	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

BABINE AGENCY, BRITISH COLUMBIA—*Concluded.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Gelangle	Coast district, on the northern shore of Trembleur lake, at the mouth of Middle river.	Trembleur Lake	945	
2	So-yan-do-star	Coast district, on the northern shore of Trembleur lake, about four miles east of reserve No. 1.	"	44	
3	Tees-lee	Coast district, on the left bank of Thatce river, about half a mile from the outlet of Trembleur lake.	"	253	Allotted by Comm'r. O'Reilly, Sept. 23, 1892. Surveyed 1898. Final confirmation, January 11, 1899.
4	Stevan	Coast district, an the left bank of Thatce river, about two and a half miles from Trembleur lake.	"	49	
5	Grande Rapide	Coast district, on the Thatce river, about seven miles from Trembleur lake.	"	584	

COWICHAN AGENCY, BRITISH COLUMBIA.

1	Beecher Bay	Metchosin district, on north shore of Beecher bay, sections 45, 46, 49, and an addition on the west of and adjoining Section 49.	Beecher Bay	502	
2	...	Metchosin district, on eastern shore of Beecher bay, section 44.	"	235	
3	Creyke Point	Metchosin district, on western shore of Beecher bay.	"	$2\frac{50}{100}$	Allotted by Joint Reserve Commission, June 11, 1877. Surveyed, 1878.
4	Wolfe Island	Metchosin district, in Beecher bay	"	11	
5	Lamb Island	" "	"	$\frac{50}{100}$	
6	Fraser Island	" "	"	14	
7	Village Island	" "	"	3	
8	Island	" Southwest of Smyth head.	"	2	
9	Island	" South of Smyth head.	"	4	
10	Island	" Opposite Section 1	"	1	
11	Albert Head	Esquimalt district.	"	4	Surrendered for a quarantine station.
1	Halalt Island.	An island at the mouth of Chemainus river, Chemainus district.	Chemainus Halalt band	140	
2	Halalt	Sections 3, 4, 5, range 7, Chemainus district.	"	287	
3	Lyacksun	Near the northern end of Valdez island, Cedar district.	Lyacksun band	1,756	

4	Shingle Point	On west shore of Valdez island, Cedar district.	"	79	
5	Portier Pass	At the southern end of Valdez island, Cedar district.	"	5	
6		Eastern portion of section 6, range 8, Chemainus district.	Penelakut band	33	Allotted by Joint Reserve Commission, January 18, 1877. Surveyed 1878.
7	Kuper Island	The whole of Kuper island, Chemainus district, with the exception of Mr. W. Conn's claim.	"	2,138	
8	Tent Island	Tent island, Chemainus district	"	85	
9	Fishing station	At Portier pass, on the northwest extremity of Galiano island, Chemainus district.	"	76	
10	Fishing station	On left bank of Chemainus river, Chemainus district, portions of sections 8, 9, range 7, 8.	Chemainus and Sicka-meen bands.	15	
11		Western portion of section 11, range 7, Chemainus district.	"	81	
12		On western shore of Oyster harbour, at its head, Oyster district.	Chemainus and Sicka-meen bands.	296	Allotted by Joint Reserve Commission, January 18, 1877. Surveyed 1878.
13		Between Oyster harbour and Chemainus bay, Oyster district.		2,692	
1	Comox	Section 4, Comox district, situated on the northern shore of Comox harbour.	Comox	155	
2	Pentledge	Comox district, on the left bank of the Pentledge river, at its confluence with the Tsolum river.		209	Allotted by Joint Reserve Commission, December 12, 1876. Surveyed 1878.
3	Grave-yard	Comox district, on Goose spit, Comox harbour		14	
1	Cowichan	Quamichan district, rge. 2, sec. 12, 13, 14	Cowichan		
		" " 3 " 12,13,14,15,16			
		" " 4 " 12,13,14,15,16	Quamichan, Comiaken,		
		" " 5 " 12,13,14,15,16	Clem-clem-a-lits,		
		" " 5 " E½ 17, E½ 18	Hamutzen, Somenos,		
		" " 6 " 15, 16	Koksailah, Kilpahlas		
		" " 7 " W½, NE¼, 10	and Kanipsin bands.		
		" " 7 " 11, 14			
		" " 8 " E½ 8, E½ 9			
		" " 8 " E½, NW¼ 10		5,789	Allotted by Joint Reserve Commission, February 17, 1877. Surveyed 1878.
		" " 8 " 11, 13-17			
		Cowichan district, " 1 " 11 to 17			
		" " 2 " 12 to 16			
		" " 3 " 14 pt of 15,16			
		" " 4 " 14			
		" " 5 " E½ 11, E½ 12. E½ 13, 14, 15			
		" " 6 " 11, 12, 13			
		" " 7 " 8 to 15			
		" " 8 " 8, 9, 10, 15			
2		" " 3 " 7		75	
3	Kil-pah-las	" " 5 " 6		51	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

COWICHAN AGENCY, BRITISH COLUMBIA—*Concluded.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
4	.....	Shawnigan district, range 5, section 19.....	.....	75	Allotted by Joint Reserve Commission, March 3, 1877.
5	Tzart-lam	Sahtlam district, on left bank Cowichan river.	.....	16	Allotted by Joint Reserve Commission, February 17, 1877.
5	Kakalatza.....	Sahtlam district, on left bank Cowichan river.	Cowichan	24	Allotted by Joint Reserve Commission, February 17, 1877. Surveyed, 1878.
6	Skutz	Cowichan Lake district, on the left bank of Cowichan river, at Skutz canyon.	.....	18	
7	"	Cowichan Lake district, on both banks of Cowichan river, at head of Skutz canyon.	.....	40	
....	Cowichan Lake.....	Cowichan Lake district, on northern shore of Cowichan lake, near its outlet, and partly on section 5 and partly in island railway belt.	Cowichan Lake.....	130	Allotted by Commissioner O'Reilly, May 31, 1887. Surveyed 1890. One hundred and seven and a half acres of section 5 conveyed by Mr. C. Green to the Dominion Government, December 1888.
....	Esquimalt..	Esquimalt district, on eastern shore of Esquimalt harbour.	Esquimalt.....	47	Held by an agreement made by the Hudson's Bay Company on behalf of the Crown, April 30, 1850. Reserve confirmed by the Joint Reserve Commission, May 4, 1878. Surveyed, 1886.
1	Nanaimo town.....	Nanaimo district, on Nanaimo harbour.....	Nanaimo	47	Old reserves confirmed by Joint Reserve Commission, December 20, 1876. Surveyed, 1874 and 1878.
2	" river	Cranberry district, on left bank of Nanaimo river.	.....	128	
3	" "	Cranberry district, sections 19, 20, 21, range 7, and portion of section 21, range 6.	.....	260	
4	" "	Sections 18 and 19, range 8, Cranberry district.	.....	200	Allotted by Joint Reserve Commission, December 20, 1876. Surveyed, 1878.
5	Fishing station	Nanaimo district, on southern shore of Gabriola island, part of section 1.	.....	2½	Allotted by Joint Reserve Commission, December 23, 1876. Surveyed, 1878.
6	Burial-ground.....	Small island about 7 chains east of reserve No. 5.	.....	.....	Allotted by Joint Reserve Commission, December 23, 1876.
....	Nanoose.....	Nanoose district, on the southern shore of Nanoose harbour.	Nanoose	209	Allotted by Joint Reserve Commission, December 15, 1876.
....	Qualicum	Newcastle district, at the mouth of the Qualicum river.	Qualicum	197	Allotted by Joint Reserve Commission, December 13, 1876. Surveyed, 1878.
1	South Saanich.....	South Saanich district, sections 7, 8, 9, S., range 1 W., sections 7, 8, 9 S., range 2 W.	Saanich	483	Original reserves confirmed by Joint Reserve Commission, March 3, 1877. Surveyed, 1878.
2	East Saanich.....	South Saanich district, sections 6, 7, 8 S., range 4 E., sections 6, 7, 8 S., range 5 E., sections 6, 7, 8 S., range 6 E.	"	605	

3	Cole Bay	North Saanich district, sections 4, 5 N., range 1 W., sections 4, 5 N., range 2 W., sections 2, 3 N., range 1 W., sections 2, 3 N., range 2 W.	"	705	Old reserve confirmed by Joint Reserve Commission, March 3, 1877. Allotted by Joint Reserve Commission, March 3, 1877. Surveyed, 1878.
4	Union Bay	North Saanich district, section 15 N., range 1 W.	"	71	Old reserve confirmed by Joint Reserve Commission, March 3, 1877. Surveyed, 1878.
5	Fulford Harbour	Cowichan district,, the southern portion of section 53, Saltspring island.	"	43	Allotted by Joint Reserve Commission, March 3, 1877. Surveyed, 1878.
6	Mayne Island	Cowichan district	"	323	Allotted by Joint Reserve Commission, March 3, 1877. Surveyed, 1878.
7	Saturna Island	Cowichan district, at Deep cove, the eastern half of section 12 and west half section 13.	"	360	Allotted by Joint Reserve Commission, March 3, 1877. Surveyed, 1878.
8	Pender Island	Cowichan district, at Hay point, Pender island.	"	8	
9	Bare Island	Cowichan district, 5 miles east of Saanich	"	26	
10	Senanus Island	Cowichan district, in Saanich inlet	"	4	
11	Malahut	Malahut district, on west shore of Saanich inlet.	"	586	
12	Hatch Point	Shawnigan district, eastern portions of sections 11, 12, range 10.	"	92	
13	Goldstream	Goldstream district, at the mouth of Goldstream.	"	12	
1	Songhees	Esquimalt district, on western shore of Victoria harbour.	Songhees	112	Held by an agreement made by the Hudson's Bay Co. on behalf of the Crown, April 30, 1850. Confirmed by Joint Reserve Commission, May 4, 1878.
2	Deadman's or Halkett Island	Victoria district, in Victoria harbour.	"	½	Allotted by Joint Reserve Commission, May 4, 1878.
3	Discovery Island	Cowichan district, the northern portion of Discovery island, 5 miles east of Victoria.	"	90	Reserved by Governor Douglas, June 10, 1863. Confirmed by Joint Reserve Commission, May 4, 1878. Surveyed.
4	Chatham Islands	Cowichan district, two islands about ⅛ mile northwest of reserve No. 3.	"	57	
1	Sooke	Sooke district, section 8, on left bank of Sooke river, at its mouth.	Sooke	65	Old reserve confirmed by Joint Reserve Commission, June 11, 1877.
2		Sooke district, section 16	"	101	Allotted by Joint Reserve Commission, June 11, 1877. Surveyed, 1878.
3	Grave-yard	Sooke district, part of sectien 7, Billings' spit.	"	3/100	
4	"	Sooke district, part of section 73, on the right bank of Sooke river, at its mouth.	"	95/100	

FRASER AGENCY, BRITISH COLUMBIA.

1	Cheam	New Westminster district, in township 3, ranges 28 and 29, west 6th meridian, left bank of Fraser river.	Cheam	883	In railway belt. Allotted by Reserve Commissioner Sproat, June 16, 1879. Surveyed, 1881. Final confirmation, March 19, 1892.
2	Tse à tah	New Westminster district, in township 3, range 28, west 6th meridian, right bank of Fraser river.	"	390	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

FRASER AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Schelowat	New Westminster district, in townships 2 and 3, range 29, west 6th meridian, on right bank of Hope slough.	Chilliwack, Skwah band.	213	In railway belt. Surveyed 1881. Allotted by Reserve Commissioner Sproat, June 20, 1879. Final confirmation, March 19, 1892.
2	Skwahla	New Westminster district, in township 3, range 30, west 6th meridian, on left bank of Hope slough.	" "	29	
3	Skwali	New Westminster district, in township 3, range 30, west 6th meridian, on right bank of Hope slough, and left bank of Shelford slough.	" "	298	
4	Skwah	New Westminster district, in townships 2 and 3, range 30, west 6th meridian, on left bank of Hope slough at its mouth.	" "	313	In railway belt. Allotted by Reserve Commissioner Sproat, May 15, 1879. Surveyed 1881. Final confirmation, March 19, 1892.
5	Skway	New Westminster district, in townships 2 and 3, range 30, west 6th meridian, on right bank of Chilliwack river at its mouth.	Skway band	538	
6	Kwaw-kwaw-a-pilt	New Westminster district, in township 23, east of coast meridian, on left bank of Kwaw-kwaw-a-pilt slough.	Chilliwack, Kwaw-kwaw-a-pilt band.	155	
7	Squiala	New Westminster district, in township 23, east of coast meridian, on the right bank of Chilliwack river.	Squiala band	209	
8	....	New Westminster district, in township 23, east of coast meridian, on the left bank of Chilliwack river at its mouth.	"	115	In railway belt. Allotted by Reserve Commissioner Sproat, May 1879. Surveyed 1881. Final confirmation, March 19, 1892.
9	Aitchelitch	New Westminster district, in township 23, east of coast meridian, on the left bank of Chilliwack river.	Ahtsalitz band	52	
10	Skul-kayn	New Westminster district, in township 26, east of coast meridian, on the right bank of the Chilliwack river.	Skul-kayn band	139	
11	Skul-kayn	New Westminster district, in township 26, east of coast meridian, on the left bank of the Chilliwack river.	"	30	
12	Ya-kwe-a-kwi-oose	New Westminster district, in township 26, east of coast meridian, on the right bank of the Chilliwack river.	Ya-kwe-a-kwi-oose	48	In railway belt. Allotted by Reserve Commissioner Sproat, June 20, 1879. Surveyed 1881. Final confirmation, March 19, 1892.

13	Tzeachten	New Westminster district, in townships 23 and 26, east of coast meridian, on the banks of the Chilliwack and Luc-a-cuc rivers.	Chilliwack, Skul-kayn and Ya-kwe-a-kwi-oose bands.	707	In railway belt. Allotted by Reserve Commissioner Sproat, June 20, 1879.
14	Soowahlie	New Westminster district, in townships 22, 23, 25 and 26, east of coast meridian.	Soowali band	1,140	Surveyed, 1881. Final confirmation, March 19, 1892.
15	Grass reserve	New Westminster district, northwest ¼ section 22, township 26.	Chilliwack Indians in common.	160	In railway belt. Allotted by Reserve Commisioner Sproat, May 15, 1879.
16	Skumalasph	New Westminster district, in township 24, on the right bank of Fraser river.	Skwah, Skwahla, Kwaw-kwaw-a-pilt, Squiala, Skway and Ahtsalitz bands in common.	1,158	Surveyed 1881. Final confirmation, March 19, 1892.
1	Coquitlam	New Westminister district, in township 38, west of coast meridian, on the right bank of Coquitlam river.	Coquitlam	6 50/100	In railway belt. Old reserves confirmed by Reserve Commissioner Sproat, July 8, 1879.
2		New Westminster district, in township 38, west of coast meridian, on the left bank of Coquitlam river.	"	202 50/100	Surveyed 1881. Final confirmation, March 19, 1892.
1	Samahquam	New Westminster district, at the 24-mile post on the Douglas portage.	Douglas	249	Allotted by Commissioner O'Reilly, Sept. 7, 1881. Surveyed. 1882.
2	Sachteen	New Westminster district, near the 23-mile post on the Douglas portage, Two graves 200 yards north of the 23-mile post.	"	15	Final confirmation, May 1, 1886.
2a	Sachteen	To the south of and adjoining reserve No. 2.	"	52	Allotted by Commissioner O'Reilly, Sept. 30, 1897. Not surveyed. Acreage approximate only.
3	Sweeteen	New Westminster district, near the 21-mile post on the Douglas portage.	"	36	Allotted by Commissioner O'Reilly, Sept. 7, 1881. Surveyed, 1882. Final confirmation, May 1, 1886.
4	Skookum Chuck	New Westminister district, at the 19-mile post on the Douglas portage.	"	526	
5	Sklahhesten	New Westminster district, at the 14-mile post on the Douglas portage.	"	79	
5a	Sklahhesten	An addition to reserve No. 5.	"	150	Allotted by Commissioner O'Reilly, Sept. 30, 1897. Not surveyed. Acreage approximate only.
6	Lelachen	New Westminster district, on the right bank of the Lillooet river, about 3 miles from its mouth.	"	37 50/100	Allotted by Commissioner O'Reilly, May 5, 1884. Surveyed, 1882. Final confirmation, May 1, 1886.
7	Grave-yard	New Westminster district, on the right bank of Lillooet river, ¾ mile below Lelachen.	"	0 75/100	
8	Douglas	New Westminster district, at the head of Harrison lake, and at the mouth of the Lillooet river.	"	1,030	
9	Morteen	New Westminster district, at the 17-mile post on the Douglas portage.	"	82	Allotted by Commissioner O'Reilly, Sept. 30, 1897. Not surveyed. Acreage approximate only.
10	Franks	New Westminster district, at the 11-mile post on the Douglas portage.	"	82	
11	Perrets	New Westminster district, near the 10-mile post on the Douglas portage.	"	33	

SCHEDULE of Indian Reserves in the Dominion.—*Continued*

FRASER AGENCY, BRITISH COLUMBIA.—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Scowlitz	New Westminster district, in township 3, range 30, west of 6th meridian, at the mouth of Harrison river.	Harrison River	616	In railway belt. Allotted by Comm'r. O'Reilly, May 14, 1881.
2	Burial-ground	New Westminster district, in township 3, range 30, west of 6th meridian, on the right bank of Harrison river, at its mouth.	"	24	Surveyed, 1881. Final confirmation, May 1, 1886.
3	Squawkum Creek	New Westminster district, in township 24, east of coast meridian, on right bank of Harrison river, 3 miles from its mouth.	"	392	In railway belt. Allotted by Comm'r. O'Reilly, May 7, 1884. Surveyed, 1884. Final confirmation, May 1, 1886.
4	Chehalis	New Westminster district, in township 4, range 30, west of 6th meridian, on the right bank of Harrison river.	"	635	In railway belt. Allotted by Comm'r. O'Reilly, May 6, 1884. Surveyed, 1884. Final confirmation, May 1, 1886.
5	Chehalis	New Westminster district, in township 4, range 29-30, west of 6th meridian, on the right bank of Harrison river.	"	1,414	In railway belt. Allotted by Comm'r. O'Reilly, May 6, 1884. Surveyed, 1885. Final confirmation, May 1, 1886.
5a	Chehalis	New Westminster district, in township 4, range 30, west of 6th meridian, on the right bank of Harrison river, between reserves 4 and 5.	"	136	In railway belt. Added to Chehalis reserves by Order in Council, August 11, 1896.
6		New Westminster district, in township 4, range 29, on left bank of Harrison river.	"	63	In railway belt. Allotted by Comm'r. O'Reilly, May 6, 1884. Surveyed, 1884. Final confirmation, May 1, 1886.
1	Homalco	Coast district, on right bank of Homalco river, at the head of Bute inlet.	Homalco	710·80	Allotted by Comm'r. O'Reilly, Aug. 10, 1888. Surveyed, 1888. Final confirmation, April 28, 1891.
2		Coast district, on left bank of Homalco river, about a mile from its mouth.	"	9·50	
3	Potato Point	Coast district, at head of Bute inlet.	"	0·40	
4	Orford Bay	Coast district, on eastern shore of Bute inlet.	"	671·30	
5	Mushkin	Coast district, on eastern shore of Valdez island.	"	10·50	
6	Aupe	Coast district, on eastern shore of Bute inlet.	"	14	
1	Hope	Yale district, in the town of Hope.	Hope	10·50	100 inches of water from Kua-kue-alla river, recorded Sept. 25, 1888.

2	Schkam	Yale district, on right bank of Fraser river, one mile above the town of Hope, township 5, range 26, west 6th meridian.	"	193	250 inches of water from Hka-wilt-san creek, Sept. 25, 1888. In railway belt.
3	Greenwood Island.	Yale district, in section 9, township 5, range 26, west of 6th meridian.	"	10	Allotted by Comm'r. Sproat, Aug. 16, 1879. Surveyed, 1881.
4	Chawuthen	Yale district, in township 5, range 27, west of 6th meridian, on right bank of Fraser river, 3 miles below Hope.	"	1,387	Final confirmation, May 8, 1889.
....	Sea Bird Island	Yale and New Westminster districts, townships 3 and 4, range 28, west 6th meridian.	..	.....	Sea Bird island, containing 4,511·50 acres, was allotted by Commissioner Sproat, on June 13, 1879, to the Hope, Popkum, Skwawtits, Ohamil, Skwawahlook, Union Bar and Yale Indians in common. Commissioner Sproat assigned to the Hope Indians (1) the right to fish in the Fraser river from a rock on lot 18, group 1, Yale district, the property of Rev. A. D. Pringle; (2) also from a rock on the right bank of Fraser river, opposite the Hope town reserve; (3) also from a rock on the right bank of Fraser river, 12 chains above Schkam reserve; (4) also from a rock on the right bank of the Fraser river opposite to Maria island.
1	Katzie	New Westminster district, in section 10, township 9, east of coast meridian, on right bank of Fraser river.	Katzie	109	In railway belt. Allotted by Comm'r. Sproat, July 3, 1879.
2	.....	New Westminster district, in section 11, township 9, east of coast meridian, on left bank of Fraser river.	"	57	Surveyed, 1880 and 1898.
3	Barnston Island	New Westminster district, the northeast ¼, section 4, township 9, east of coast meridian, on right bank of Parson's channel, Fraser river.	"	135	In railway belt. Allotted by Comm'r. O'Reilly, Sept. 13, 1898.
4	Pitt Lake	New Westminster district, in sections 3 and 4, township 5, west of 7th meridian, at the outlet of Pitt lake.	"	540	Surveyed, 1898 and 1900.
5	Grave-yard	New Westminster district, the northwest corner of lot 279, group 1.	"	1	In railway belt. Purchased by the Dominion government from Mr. John Hammond, Dec. 1, 1898. Surveyed, 1899.
1	Clahoose	Coast district, at the head of Toba inlet.	Clahoose	2,280	
2	Burial-ground	Coast district, on western shore of Toba inlet, about a mile west of reserve No. 1.	"	0·75	
3	Salmon Bay	Coast district, at the head of Salmon bay, Toba inlet.	"	174	
4	Siakin	New Westminster district, on eastern shore of Waddington channel, near Dean point.	"	7	Allotted by Comm'r. O'Reilly, August 12, 1888.

SCHEDULE of Indian Reserves in the Dominion.—*Continued*

FRASER AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
5	Deep Valley	Coast district, on eastern shore of Ramsey arm.	Clahoose	61	Surveyed, 1888. Final confirmation, May 18, 1889.
6	Quequa	New Westminster district, on eastern shore of Lewis channel.	"	4	
7	Tork	Sayward district, on western shore of Squirrel cove, Cortes island.	"	698	
8		Sayward district, on northern shore of Squirrel cove, Cortes island.	"	39	
9	Ahpocum	New Westminster district, at the head of Forbes bay, Homfray channel.	"	62	
10	Tatpo-oose	Sayward district, at the head of Hoskyn inlet, Valdez island.	"	29	Allotted by Comm'r Vowell, June 25, 1900. Surveyed, 1900.
1	Whonock	New Westminster district, in townships 14, 15, east of coast meridian, on the right bank of Fraser river.	Langley	92	
2		New Westminster district, the northwest ¼ section 3, township 15, east of coast meridian, on right bank of Stave river.	"	127	
3		New Westminster district, lots 444 and 445, group 1, townships 14, 15, east of coast meridian, on left bank of Stave river at its mouth.	"	122	In railway belt.
4		New Westminster district, in section 2, township 15, east of coast meridian, on left bank of Stave river.	"	239	Allotted by Comm'r Sproat, June 27, 1879. Surveyed, 1880, 1881. Final confirmation, June 24, 1887.
5		New Westminster district, in townships 11 and 12, east of coast meridian, on right bank of Fraser river.	"	360·50	
6	McMillan's Island	New Westminster district, in townships 11, 12, east of coast meridian, in Fraser river, near Langley.	"	.....	
7		New Westminster district, part of section 21, block 5 north, range 2 west.	"	40	
8		New Westminster district, part of lot 1, group 2, on left bank of the Fraser, opposite New Westminster.	"	4·68	1·29 acres of this reserve was acquired by Order in Council, May 16, 1899.
1	Sahhacum	New Westminster district, part of section 34, township 16, east of coast meridian.	Matsqui	52·50	In railway belt.

2	Matsqui Main reserve.....	New Westminster district, part of section 7, township 17, east of coast meridian.	"	353·85	Allotted by Comm'r Sproat, June 20, 1879.
3	Three Islands.....	New Westminster district, in Fraser river, north of reserve No. 2.	"	608·50	Surveyed, 1881. Final confirmation, March 19, 1892.
4	Matsqui.	New Westminster district, part of section 6, township 13, east of coast meridian.	"	60	
1	.....	New Westminster district, part of lots 1 and 2, group 2, on left bank of Fraser river, opposite New Westminster.	Musqueam.....	5·16	1 acre of this reserve was acquired by Order in Council, May 16, 1899. 1·13 acres purchased from Mr. Justice Bole, June 17, 1897.
2	Musqueam.....	New Westminster district, on the right bank of the north arm of Fraser river at its mouth.	"	392·50	Allotted by Comm'r Sproat, June 30, 1879. Surveyed, 1881 and 1897. Final confirmation, March 19, 1892.
3	Sea Island.....	New Westminster district, lots 8 and 9, Sea island, on the left bank of the north arm of Fraser river at its mouth.	"	60·75	
1	Ohamil.	Yale district, in township 4, range 27, west of 6th meridian, on left bank of Fraser river opposite Ruby creek.	Ohamil.....	458	In railway belt.
2	Wahleach Island,...	Yale district, in Fraser river west of reserve No. 1.	"	171	Allotted by Comm'r Sproat, June 12, 1879. Surveyed, 1881.
	Seabird Island.....	Yale and New Westminster districts, townships 3 and 4, range 28, west 6th meridian.	.....	.....	Seabird island, containing 4,511$\frac{50}{100}$ acres, was allotted by Comm'r Sproat on June 13, 1879, to the Ohamil, Popkum, Skwawtits, Skwawahlook, Hope, Union Bar, and Yale Indians in common.
1	Pemberton	Lillooet district, at the upper end of the lower Pemberton meadows.	Pemberton.....	188$\frac{50}{100}$	
2	....	Lillooet district, on the upper Pemberton meadows, between the Lillooet and Squamish rivers.	"	105	
3	.....	Lilloet district, on the lower Pemberton meadows between the north and south branches of the Lillooet river.	"	909$\frac{50}{100}$	Allotted by Comm'r O'Reilly, Sept. 6, 1881. Surveyed, 1882. Final confirmation, June 4, 1884.
4	Lokla.....	Lillooet district, on the Birkenhead river, about seven miles from reserve No. 1.	"	19$\frac{50}{100}$	
5	Grave-yard...	Lillooet district, near the 29 mile house at the foot of Pemberton lake, on Mr. Joseph Smith's pre-emption claim.	"	1$\frac{40}{100}$	Allotted by Comm'r O'Reilly, Sept. 6, 1881. Surveyed, 1882. Final confirmation, June 4, 1884. The exclusive right of fishing in the Lillooet river from the foot of Pemberton lake $\frac{1}{2}$ mile down stream is reserved for these Indians.
	Popkum	Yale district in township 3, range 28, west of 6th meridian, on the left bank of Fraser river.	Popkum.....	381	In railway belt. Old reserve confirmed by Comm'r Sproat, June 16, 1879. Surveyed 1880. Final confirmation, March 19, 1892.
	Seabird Island..... ...	Yale and New Westminster districts, townships 3 and 4, range 28, west of 6th meridian.	.....	.....	Seabird island, containing 4,51$\frac{50}{100}$ acres, was allotted by Comm'r Sproat on June 13, 1879, to the Popkum, Skwawtits, Ohamil, Skwawahlook, Hope, Union Bar and Yale Indians in common.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

FRASER AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
	Semiahmoo	New Westminster district, sections 1 and 2, township 1, west of coast meridian, on Semiahmoo bay, on the international boundary line.	Semiahmoo	392	Allotted by Comm'r. O'Reilly, June 14, 1887. Surveyed, 1890. Final confirmation, March 26, 1892.
1	Tsawcome	New Westminster district, in Trail bay, 1½ mile north of White island.	Seshelt	45 25/100	
2	Seshelt	New Westminster district, between Trail bay and Porpoise bay, Jervis inlet.	"	607	
3	Sway-calse or Kuk-way-win.	New Westminster district, on western shore of Porpoise bay, Jervis inlet.	"	11 25/100	
4	Oalthkiyim	New Westminster district, on western shore of Porpoise bay, Jervis inlet.	"	8 90/100	
5	Klaalth	New Westminster district, on eastern shore of Porpoise bay, Jervis inlet.	"	3 44/100	Allotted by Joint Reserve Commission, December 7, 1876.
6	Klayekwin	New Westminster district, on eastern shore of Narrows arm, Jervis inlet.	"	2 45/100	Surveyed, 1881.
7	Klayekwin	New Westminster district, on western shore of Narrows arm, Jervis inlet.	"	53	
8	Klayekwin	New Westminster district, at the head of Narrows arm, Jervis inlet.		196	
9	Chickwat	New Westminster district, on the right bank of the Tzoonye river, about three miles above reserve No. 8.		5	
10	Tchahchelaithtenum	New Westminster district, east of Boulder island, Seshelt inlet, Jervis inlet.	Sesheit	19·10	
11	Hunnaechin	New Westminster district, at the head of Queen's reach, Jervis inlet.	"	260·50	
12	Swaywelat	New Westminster district, on the western side of the entrance to Princess Louise inlet, Jervis inlet.	"	1·10	
13	Chelohsin	New Westminster district, on the northern shore of Queen's reach, Jervis inlet.	"	3·33	
14	Paykulkun	New Westminster district, on the northern shore of Queen's reach, Jervis inlet.	"	4·55	
15	Tsooahdie	New Westminster district, at Deserted bay, Jervis inlet.	"	724·50	
16	Slayathlum	New Westminster district, on the western shore of Jervis inlet, at the head of Prince of Wales reach.	"	4·65	Allotted by Joint Reserve Commission, December 7, 1876. Surveyed, 1881.

17	Skwawkwechin	New Westminster district, at the head of Vancouver bay, Jervis inlet.	"	13·20	
18	Smeshalin	New Westminster district, near the north-east corner of Pender harbour, Malaspina strait.	"	10	
19	Suahbin	New Westminster district, at Garden bay, Pender harbour, Malaspina strait.	"	6·50	
....	Grave-yard	On Garden bay, ten chains east of reserve 19.	"	0·35	
20	Sallahlus No. 1	New Westminster district, in Pender harbour, opposite Gerran's bay.	"	3·40	
....	Sallahlus No. 2	On Gerran's bay, Pender harbour.	"	1	
21	Sekateton	New Westminster district, a rocky island in Pender harbour, Malaspina strait.	"	1·25	
22	Saughanaught	New Westminster district, on the eastern shore of Agamemnon channel, one mile north of Norman point.	"	35	Allotted by Commr. Vowell, June 22, 1900. Not surveyed. Acreage approximate.
23	Cokqueneets	New Westminster district, at the mouth of Eagle creek, on north shore of Malaspina strait.	"	80	
1	Skwawahlook	Yale district, in sections 4 and 5, township 5, range 27, west of 6th meridian, on right bank of Fraser river.	Skwawahlook	151	In railway belt.
2	Ruby Creek	Yale district, in section 5, township 5, range 27, west of 6th meridian, on left bank of Luksectsissum or Ruby creek.	"	45·50	Allotted by Commr. Sproat, June 13, 1879. Surveyed, 1881.
....	Seabird Island	Yale and New Westminster districts, townships 3 and 4, range 28, west of 6th meridian.	"		Seabird island, containing 4,511·50 acres, was allotted by Commr. Sproat on June 13, 1879, to the Skwawahlook, Popkum, Skwawtits, Ohamil, Hope, Union Bar and Yale Indians in common.
1	Mission	New Westminster district, on north shore of Burrard inlet.	Squamish	38	
2	Seymour Creek	New Westminster district, on north shore of Burrard inlet, at the Second narrows.	"	147	Allotted by Joint Reserve Commission, June 15, 1877.
3		New Westminster district, on north shore of Burrard inlet, near the North arm.	"	275	Surveyed, 1880.
4	Inlailawatash	New Westminster district, at the head of the North arm, Burrard inlet.	"	33	
5	Kappillahno	New Westminster district, on northern shore of Burrard inlet at the First narrows.	"	444	Boundaries of this reserve finally amended and confirmed May 22, 1893.
6	False Creek	New Westminster district, on southern shore of False creek at its mouth.	"	80	Allotted by Joint Reserve Commission, June 15, 1877. Surveyed, 1880.
7	Skowishim	New Westminster district, on the left bank of the Squamish river, twenty-five miles from its mouth.	"	100	
8	Chuckchuck	New Westminster district, on the right bank of the Squamish river, three miles above Reserve No. 7.	"	0·15	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

FRASER AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
9	Poyam	New Westminster district, on the left bank of the Squamish river, seven miles above reserve No. 7.	Squamish	0·67	
10	Skowishim Grave-yard	New Westminster district, on the left bank of the Squami river, two miles below reserve No. 7.	"	·10	Allotted by Joint Reserve Commission, November 27, 1876. Surveyed, 1881.
11	Cheakamus	New Westminster district, on the left bank of the Squamish river, between Chemai creek and Cheakamus river.	"	4,046·50	
12	Yookwitz	New Westminster district, on the right bank of the Squamish river, opposite the mouth of Cheakamus river.	"	23	
13	Poquiosin and Skamain	New Westminster district, on the left bank of the Squamish river, near the mouth of Cheakamus river.	"	111·80	
14	Waiwakum	New Westminster district, on the left bank of Squamish river.	"	37	
15	Aikwucks	New Westminster district, on the right bank of Squamish river.	"	27·45	
16	Seaichem	New Westminster district, on the left bank of Kowtain slough, Squamish river.	"	68	
17	Kowtain	New Westminster district, on the left bank of Kowtain slough, Squamish river.	"	57·50	
18	Yekwaupsum	New Westminster district, on the left bank of Squamish river, one and a half miles from its mouth.	"	154	
19	" Burial-ground	New Westminster district, one and a half miles north of Yekwaupsum.	"	2·25	Allotted by Joint Reserve Commission, November 27, 1876. Surveyed, 1881.
20	Mamaquum Island	New Westminster district, an island in the eastern branch of Squamish river.	"	13	
21	Squamish Island	New Westminster district, the northern portion of Squamish island, at the mouth of the Squamish river.	"	416·50	
22	Skwulwailum	New Westminster district, at the mouth of the Sqnamish river, at head of Howe sound.	"	188·23	
23	Ahtsann	New Westminster district, on the western branch of the Squamish river, at its mouth.	"	229·20	Allotted by Joint Reserve Commission, November

24	Stawamus	New Westminster district, on the eastern shore of Howe sound, at its head.	"	141·50	27, 1876. Surveyed, 1881.
25	Kaikalalahun	New Westminster district, on the western shore of Howe sound, opposite to Woolridge island.	"	33	
26	Chekwelp	New Westminster district, on the western shore of Howe sound, opposite to Keats island.	"	34·50	Allotted by Joint Reserve Commission, November 28, 1876. Surveyed, 1881.
27	" Burial-ground	New Westminster district, the most northern of the Shelter islands, Howe sound.	"	0·50	
1	Sliammon	New Westminster district, on northern shore of Malaspina strait, east of Harwood island.	Sliammon	1,924·50	
2	Hardwood Island	New Westminster district, in the strait of Georgia.	"	2,095	Allotted by Commissioner O'Reilly, August 6, 1888. Surveyed, 1888.
3	Paukeanum	Sayward district, in Smelt bay, Cortes island.	"	200	Final confirmation, April, 28, 1891.
4	Toquana	New Westminster district, at the head of Theodosia arm, Malaspina inlet.	"	395·50	
5	Tokenatch	New Westminster district, at the head of Freke's anchorage, Malaspina inlet.	"	53	Allotted by Commissioner O'Reilly, August 6, 1888. Surveyed, 1888. Final confirmation, April 28, 1891.
6	Kahkaykay	New Westminster district, on Gifford peninsula, Malaspina inlet.	"	45	
1	Skwatits	Yale district, in section 13, township 4, range 28, west of the 6th meridian, on left bank of Fraser river, opposite the head of Seabird island.	Skwawtits	335·50	In railway belt. Allotted by Commissioner Sproat, June 13, 1879. Surveyed, 1881.
2		Yale district, in section 24, township 4, range 28, west of 6th meridian, north of and adjoining reserve No. 1.	"	98	
....	Seabird Island	Yale and New Westminster districts, townships 3 and 4, range 28, west of 6th meridian.			Seabird island, containing 4,511·50 acres, was allotted by Commissioner Sproat on June 13, 1879, to the Skwawtits, Popkum, Ohamil, Skwawahlook, Hope, Union Bar, and Yale Indians in common.
1	Yaalstrick	New Westminster district, in sections 28, 29, 32 and 33, township 23, east of coast meridian. An island in Fraser river.	Sumass	283·90	
2	Lackaway	New Westminster district, in NE ¼, section 20, township 23, east of coast meridian, on left bank of Fraser river, near Miller's landing.	"	39	
3	Timber reserve	New Westminster district, in SW ¼, section 28, township 23, east of coast meridian.	"	10	
4	Papekwatchin	New Westminster district, in township 20, east of coast meridian, on right bank of Fraser river.	"	235	In railway belt. Allotted by Commissioner Sproat, May 15, 1879. Surveyed, 1881. Final confirmation, March 19, 1892.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

FRASER AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
5	Aylechootlook	New Westminster district, in section 13, township 20, east of coast meridian, on the right bank of Sumass river.	Sumass	49	
6	Upper Sumass	New Westminster district, in township 19, east of coast meridian, on the banks of Sumass river, above Sumass lake.	"	610·80	
7	Sumass	New Westminster district, the NW ¼, section 6, township 19, east of coast meridian, on the banks of Sumass river.	"	160	
8	Holachten	New Westminster district, in township 24, east of coast meridian, on right bank of Nicomen slough.	Sumass (Lakahahmen band.)	300	
9	Timber reserve	New Westminster district, in section 4, township 24, east of coast meridian.	" "	59	In railway belt. Allotted by Commissioner Sproat, June 26, 1879. Surveyed, 1881. Final confirmation, March 19, 1892.
10	Skweahm	New Westminster district, in townships 23, 24, east of coast meridian, Nicomen slough.	" "	183	
11	Lakahahmen	New Westminster district, in section 6, township 24, east of coast meridian, on right bank of Nicomen slough.	" "	94·10	
....	Tsawwassen	New Westminster district, in township 5, on the gulf of Georgia, one mile north of the international boundary line.	Tsawwassen	604·25	Allotted by Commissioner Sproat, December 28, 1878. Surveyed, 1881. Final confirmation, March 19, 1892.
1	Yale Town	Yale district, in section 14, township 7, range 26, west of 6th meridian.	Yale	17·50	Allotted by Comm'r. O'Reilly, May 23, 1881. 20 inches of water from Yale creek recorded Sept. 25, 1888.
2	4½ Mile reserve	Yale district, in section 24, township 7, range 26, west of 6th meridian, on right bank of Fraser river, 4½ miles above Yale.	"	15	Allotted by Comm'r. Sproat, August 5, 1879. 15 inches of water from the stream on the reserve and all the water from other sources on the reserve recorded Sept. 25, 1888.
3	Kuthlalth	Yale district, in section 13, township 7, range 26, west of 6th meridian, on left bank of Fraser river, ¾ mile above Yale.	"	362	Allotted by Comm'r. Sproat, August 5, 1879. Foreshore added to this reserve by Order in Council, August 9, 1900; 20 inches of water recorded Sept. 25, 1888.
4	Qualark	Yale district, in township 6, range 26, west of 6th meridian, on left bank of Fraser river, three miles below Yale.	"	27	Allotted by Comm'r. O'Reilly, May 23, 1881. In railway belt. Surveyed, 1882-84. Final confirmation, May 1, 1886.

5	Albert Flat	Yale district, in townships 6, 7, range 26, west of 6th meridian, on right bank of Fraser river, three miles below Yale.	"	150	Allotted by Comm'r. Sproat, August 5, 1879. 100 inches of water from Gordon creek, and all the water from other sources on the reserve recorded Sept. 25, 1888.
6	Squeah	Yale district, in township 6, range 26, west of 6th meridian, on left bank of Fraser, five miles below Yale.	"	46	Allotted by Comm'r. O'Reilly, May 23, 1881. 25 inches of water from Squeah creek recorded Sept. 25, 1888.
7	Kaykaip	Yale district, in township 6, range 26, west of 6th meridian, on left bank of Fraser river, 5½ miles below Yale.	"	31	Allotted by Comm'r. O'Reilly, May 23, 1881. 20 inches of water from Kaykaip creek recorded Sept. 25, 1888.
8	Stullawheets	Yale district, in township 6, range 26, west of 6th meridian, on right bank of Fraser river.	"	134·50	Allotted by Comm'r. Sproat, August 5, 1879. 50 inches of water from Stullawheets creek recorded Sept. 25, 1888.
9	Lukseetsis-sum	Yale district, in townships 4, 5, range 27, west of 6th meridian, at mouth of Ruby creek.	"	157	In railway belt. Allotted by Comm'r. Sproat, August 5, 1879, Surveyed 1882-84. Final confirmation, May 1, 1886.
10	Skawahlum	Yale district, in township 6, range 26, west of 6th meridian, on right bank of Fraser river.	" Union Bar band	14·80	20 inches of water from Skawayluk creek recorded Sept. 25, 1888.
11	Puckatholetchin	Yale district, in townships 5, 6, range 26, west of 6th meridian, on right bank of Fraser river, five miles above Hope.	" "	566·50	150 inches of water from American Bar creek recorded Sept. 25, 1888.
12	Klaklacum	Yale district, in township 5, range 26, west of 6th meridian, on right bank of Fraser river, three miles above Hope.	" "	71·75	20 inches of water from American Bar creek recorded Sept. 25, 1888.
13	Trafalgar Flat	Yale district, in township 5, range 26, west of 6th meridian, on left bank of Fraser river, 2½ miles above Hope.	" "	172	In railway belt. Allotted by Comm'r. Sproat, August 12, 1879. Surveyed, 1881.
14	Timber reserve	Yale district, in township 5, range 26, west of 6th meridian, on left bank of Fraser river, three miles above Hope.	" "	224·20	200 inches of water from Hamlin's creek recorded Sept. 25, 1888, for use on reserve No. 13.
15	Aywawwis	Yale district, in township 5, range 26, west of 6th meridian on left bank of the Fraser river, at the mouth of Coquehalle river.	" "	221·90	
16	Kawkawa	Yale district, in section 14, township 5, range 26, west of 6th meridian, on eastern shore of Kawkawa lake.	" "	16	10 inches of water from the stream which flows through the land, and all water from other sources on the reserve recorded Sept. 25, 1888.
....	Seabird Island	Yale and New Westminster districts, townships 3 and 4, range 28, west of 6th meridian.	" "	.....	Seabird island, containing 4,511·50 acres, was allotted by Comm'r. Sproat on June 13, 1879, to the Yale, Union Bar, Popkum, Skwawtits, Ohamil, Skwawahlook and Hope Indians in common.

SCHEDULE of Indian Reserves in the Dominion.—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Hustalen	Kamloops division of Yale district, at the foot of Adams lake on its left bank.	Adams Lake, Sahhaltkum band	2,178	100 inches of water recorded from East creek and all the water from the other sources of water supply on the reserve.
2	Squaam	Kamloops division of Yale district, on the western shore of Adams lake in Agate bay.	"	80	10 inches of water recorded from Pass creek.
3	Toops	Kamloops division of Yale district, at the foot of Adams lake on its right bank.	"	25	10 inches of water recorded from the nearest creek northward from the reserve.
4	Sahhahltkum	Kamloops division of Yale district, on the right bank of Thompson river, at the foot of Little Shuswap lake, in township 21, range 13, west of the 6th meridian.	"	3,206	100 inches of water recorded from the creek which flows along the western boundary of the reserve into Neskainlith lake; 250 inches of water from Neskainlith lake; 50 inches from the lake on the high hills westward from the foot of Little Shuswap lake.
4a	"	Kamloops division of Yale district, on the right bank of Thompson river.	"	334	Reserved by Dominion Order in Council of Sept. 30, 1895.
5	Stequmwhulpa	Kamloops division of Yale district, on the southern shore of Little Shuswap lake.	"	250	The Adams lake reserves are in the railway belt. They were allotted by the Joint Reserve Commission, August 13, 1877. Surveyed in 1878 and 1884. Final confirmation of reserves 1, 2, 3 and 5, May 7, 1887.
6&7	Switsemalph	Kamloops division of Yale district, the northern and southern portions of Switsemalph reserve on Salmon arm of Shuswap lake, in township 20, range 10, west of 6th meridian.	"	790 325	Two reserves on the Salmon arm were allotted by the Joint Reserve Commission to the Neskainlith, Adams lake and little Shuswap lake tribes in common. They have since been divided by the Indian agent among the several bands interested.
1	Cheetsum's Farm	Kamloops division of Yale district, in township 20, range 24, west of 6th meridian.	Ashcroft	770	30 inches of water recorded from the lower part of Minnaberiet creek, and 20 inches from the spring near Cheetsum's house, and from all other sources of water-supply on the reserve.
2	105 Mile Post	Kamloops division of Yale district, in township 20, ranges 24 and 25, west of 6th meridian.	"	3,470	20 inches of water recorded from a spring on the reserve; 200 inches from the Bonaparte river and all the water from all other sources of water-supply on the reserve.
3	McLean's Lake	Kamloops division of Yale district, in township 21, range 25, west of 6th meridian.	"	1,003	25 inches of water recorded from the stream flowing into McLean's lake. All these reserves are in the railway belt. Allotted by Commissioner O'Reilly, August 10, 1881.

					Surveyed in 1885. Final confirmation, May, 1, 1886. The Ashcroft Indians have the privilege of fishing on both banks of the Thompson river from the head of the Black canyon up stream a distance of one mile; also the privilege of fishing on both banks of the Thompson river from the mouth of Minnaberiets creek, up stream a distance of one-half mile.
1	Bonaparte	Kamloops division of Yale district, portions of sections 34, 35, tp. 21, R. 25, west of 6th meridian, and sections 2, 3, tp. 22, R. 25, west of the 6th meridian.	Bonaparte	477	100 inches of water recorded from the Bonaparte river and 50 inches from Hat creek.
2	Manvais Rocher	Kamloops division of Yale district, on Thompson river, in section 14, tp. 21, R. 23, west of 6th meridian.	"	99·80	30 inches of water recorded from Knife creek, and all the water from all other sources of water-supply on the reserve.
3	Loon Lake	Lillooet district, at the western extremity of Loon lake, 25 miles north of Ashcroft.	"	59	Allotted by Commissioner Sproat, August 10, 1878, surveyed 1883, final confirmation, June 4, 1884.
4	Upper Hat Creek	Lillooet district, portions of sections 19, 20, 29, 30, 31, 32 and 33, tp. 21, R. 26, west of 6th meridian.	"	2,057	100 inches of water recorded from the stream which discharges into Hat creek, opposite the Marble canyon, 150 inches from Hat creek, and all the water from all other sources of water-supply on the reserve.
5	Lower Hat Creek	Lillooet district, portions of sections 17, 18, 19, 20, tp. 22, R. 25, and sections 13, 14, 15, 22, 23, 24, tp. 22, R. 26, west of 6th meridian.	"	2,078	100 inches of water recorded from Sultatkua creek, 150 inches from Hat creek, and all the water from all other sources of water-supply on the reserve.
1a	Bonaparte	Kamloops division of Yale district, portions of sections 33, 34, 35, tp. 21, R. 25, and sections 1 and 2, tp. 22, R. 25, west of 6th meridian	"	1,343	Allotted by Commissioner O'Reilly, June 5, 1890. Not surveyed. With the exception of reserve No. 3, Loon lake, all the Bonaparte reserves are within the railway belt. Reserves 1, 2 and 3, allotted by Commissioner Sproat, August 10, 1878, surveyed 1883. Reserves 4 and 5, allotted by Commissioner O'Reilly, August 6, 1881, surveyed, 1883.
1	Tsawawmuck	Yale district, on the left bank of Fraser river, at the mouth of Ainslie creek, 32 miles above Yale.	Boothroyd, Chomok band	47½	40 inches of water recorded from Ainslie creek, and all the water from all other sources of water-supply on the reserve.
2	Tsintahktl	Yale district, on the left bank of Fraser river, 33 miles above Yale.	" "	37	15 inches of water recorded from Jamieson creek, and all the water from all other sources of water-supply on the reserve.
3	Speyum	Yale district, on the right bank of Fraser river, opposite reserve No. 1, 32 miles above Yale.	" "	374½	50 inches of water recorded from Speyum creek; 50 inches from Nepopulchin creek, and all the water from all other sources of water-supply on the reserve.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
4	Kahmoose	Yale district, on the left bank of the Fraser river, 34 miles above Yale, in sec. 4, tp. 12, R. 26, west of 6th meridian.	Boothroyd, Chomok band	60	10 inches of water recorded from Jamieson creek, and all the water from all other sources of water-supply on the reserve.
5	Sho-ook	Yale district, between the 35 and 36 mile posts, on the road from Yale, in tp. 12, R. 26, west of 6th meridian.	" "	413	200 inches of water recorded from Nkatsam creek, and all the water from all other sources of water-supply on the reserve.
6	Inkahtsaph	Yale district, on the left bank of the Fraser river, 38 miles from Yale, in tp. 12, R. 26, west of 6th meridian.	" "	454	150 inches of water recorded from Nkatsam creek, 50 inches from the creek at the north end of the reserve, and all the water from all other sources of water supply on the reserve.
7	Chukcheetso	Yale district, on the right bank of the Fraser river, opposite Inkahtsaph reserve.	Boothroyd	44½	100 inches of water recorded from Chukcheetso creek, and all the water from all other sources of water supply on the reserve.
8	Staiyahanny	Yale district, on the left bank of the Fraser river, 42½ miles above Yale.	"	74½	50 inches of water from Cheuhcheuh creek, and all the spare water from 42 Mile creek, and all the water from all other sources of water-supply on the reserve.
9	Stlakament	Yale district, to the west of the Fraser river, opposite reserve No. 8.	"	40	40 inches of water recorded from Stlakament creek, and all the water from all other sources of water supply on the reserve.
10	Dufferin Reserve	Yale district, on the left bank of the Fraser river, in sec. 11, tp. 14, R. 27, west of 6th meridian.	"	15½	20 inches of water recorded from Cheuhcheuh creek, and all the water from all other sources of water supply on the reserve.
					All the Boothroyd reserves are within the railway belt. They were allotted by Commissioner Sproat, June 8, 1878. Surveyed 1885. Final confirmation, June 24, 1887.
1	Tuckkwiowhum	Yale district, on the left bank of the Fraser river, at the mouth of Anderson river, 24 miles above Yale, township 10, range 26, west 6th meridian.	Boston Bar	95	100 inches of water recorded from Anderson river, 20 inches from Ryan creek and all the water from all other sources of water-supply on the reserve.
2	Kopchitchin	Yale district, on the right bank of the Fraser, at North Bend, 2 miles above Boston Bar, township 10, range 26, west 6th meridian.	"	359	50 inches of water recorded from the creek at North Bend; 100 inches from the creek in the middle of the reserve; 100 inches from the creek at the south end of the reserve.
3	Austin's Flat	Yale district, on the left bank of the Fraser, near Hell's Gate, 19 miles above Yale, on section 34, township 9, range 26, west 6th meridian.	"	3¼	10 inches of water recorded from the first creek below the reserve, and all the water from all other sources of water-supply on the reserve.

4	Bucktum	Yale district, on the left bank of the Fraser, at Butcher's Flat, section 14, township 11, range 26, west 6th meridian, six miles above Boston Bar.	"	64	100 inches of water recorded from the creek on the reserve and all the water from all other sources of water-supply on the reserve.
5	Scaucy	Yale district, on the right bank of the Fraser, and right bank of Scaucy creek, 3 miles below Boston Bar, section 10, township 10, range 26, west 6th meridian.	"	18	50 inches of water recorded from Scaucy creek, and all the water from all other sources of water-supply on the reserve.
6	Paul's	Yale district, on the right bank of the Fraser, one mile above Hell's Gate, in section 10, township 10, range 26, west 6th meridian.	"	1¾	5 inches of water recorded from Scaucy creek, and all the water from all other sources of water-supply on the reserve.
7	Shrypttahooks	Yale district, on the right bank of the Fraser, two miles below Boston Bar, in section 14, township 10, range 26, west 6th meridian.	"	87	100 inches of water recorded from Scaucy creek, and all the water from all other sources of water-supply on the reserve. The Boston Bar reserves are within the railway belt, they were allotted by Comm'r. Sproat, June 1, 1878; surveyed in 1882 and 1885, and finally confirmed, June 24, 1887.
1	Kumcheen	Kamloops division of Yale district, on the left bank of Thompson at the mouth of Nicola river, on section 12, township 17, range 25, west 6th meridian.	Cook's Ferry	21¾	30 inches of water recorded from Nicola river.
2	Skoonkoon	Kamloops division of Yale district, on the right bank of the Thompson river, 5 miles below Spence's bridge, in section 17, township 16, range 25, west 6th meridian.	"	55	50 inches of water recorded from Skoonkoon creek, and all the water from all other sources of water supply on the reserve.
3	Shawniken	Kamloops division of Yale district, on the right bank of Thompson river, one mile below Spence's bridge, in sections 4 and 10, township 17, range 25, west 6th meridian.	"	106⅕	50 inches of water recorded from Shawniken creek, at the falls, and all the water from all other sources of water-supply on the reserve.
4		Kamloops division of Yale district, on the left bank of the Thompson river, ½ mile below Spence's bridge, in section 10, township 17, range 25, west 6th meridian.	"	35	10 inches of water recorded from the Thompson river.
4A		Kamloops division of Yale district, on the left bank of the Thompson river, to the south of and adjoining reserve No. 4.	"	108	Allotted by Commissioner O'Reilly, October 15, 1889. Unsurveyed.
5	Chuchhriaschin	Kamloops division of Yale district, in the Chuchhriaschin valley, three miles north of Spence's bridge, in section 26, township 17, range 25, west of 6th meridian.	"	20	75 inches of water recorded from Nicoelton creek, all the water from two springs in the mountains on the south side of the valley, and all the water from all other water sources on the reserve.
5A	"	Kamloops division of Yale district, on the Chuchhriaschin valley, two miles north of Spence's bridge, in section 23, township 17, range 25, west 6th meridian.	"	20	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
6	Nicoelton	Kamloops division of Yale district, in the Nicoelton valley, four miles north of Spence's bridge, in township 18, range 25, west of the 6th meridian.	Cook's Ferry	2008·50	50 inches of water recorded from Nicoelton creek, and all the water from all other sources of water-supply on the reserve.
7	Kloklowuck	Kamloops division of Yale district, in the Nicola valley, seven miles from Spence's bridge, on the right bank of the Nicola river.	"	2·9	10 inches of water recorded from the stream near the southern end of the reserve, 40 inches from Kloklowuck creek, and all the water from all other sources of water-supply on the reserve.
8	Tsinkahtl	Kamloops division of Yale district, on the right bank of Thompson river, six miles above Spence's bridge.	"	19·80	5 inches of water from the spring nearest the reserve.
8A	...	Kamloops division of Yale district, on the hills above the 87 mile post on the Yale-Cariboo road, in section 7, township 18, range 24, west of 6th meridian.	"	10	
9	Pemynoos	Kamloops division of Yale district, on the left bank of the Thompson river, five miles above Spence's bridge, in townships 17, 18, range 24, west of 6th meridian.	"	4507·70	100 inches of water recorded from Pemynoos creek, 200 inches of water from Incaughkalk creek, and 100 inches from Pokheitsk creek.
10	Pokheitsk	Kamloops division of Yale district, on the left bank of the Thompson river, above and adjoining reserve No. 9.	"	36	Not surveyed. 50 inches of water recorded from Pokheitsk creek.
11	Spatsim	Kamloops division of Yale district, on the left bank of Thompson river, ½ mile above Kimball railway station, in section 31, township 18, range 24, west of 6th meridian.	"	193	50 inches of water recorded from Pokheitsk creek, 25 inches from Spatsim creek, and all the water from all sources of water-supply on the reserve.
11A	"	Kamloops division of Yale district, on the left bank of Thompson river, to the north of and adjoining reserve No. 11.	"	160	Allotted by Commissioner O'Reilly, Oct. 14, 1889. Not surveyed. Reserves Nos. 1, 2, 3, 4, 5, 5A, 6, 7, 8, 8A, were allotted by Commissioner Sproat, July 20, 1878; Nos. 9, 10, 11, on June 30, 1880. These reserves were surveyed in 1885.
12	Chilthnux	Kamloops division of Yale district, on Pokheitsk creek, about 15 miles from its mouth.	"	365	Allotted by Commissioner O'Reilly, Oct. 15, 1889. Not surveyed.
13	Quiltanton	Kamloops division of Yale district, on the eastern shore of Divide lake, Highland valley, about 1 mile northeast of reserve No. 12.	"	520	

14	Enquocto	Kamloops division of Yale district, in Highland valley, 1¾ miles east of reserve No. 13.	"	560	
15	Squetankilhats	Kamloops division of Yale district, in Highland valley, ¾ mile east of reserve No. 14.	"	520	
....	Deadman's Creek	Kamloops division of Yale district, on the banks of Deadman's creek, a tributary of the Thompson river.	Deadman's Creek	20·134	Allotted by Joint Reserve Commission, July 28, 1877. Surveyed. 500 inches of water recorded from Deadman's creek, 25 inches from Bates creek, and all the water from all other sources of water-supply on the reserve.
1	Kamloops	Kamloops division of Yale district, on the right bank of the Thompson river, at its confluence with the north fork, in townships 20 and 21, range 17, west of 6th meridian.	Kamloops	33·131	500 inches of water recorded from St. Paul's creek, and all the water from all sources of water-supply on the reserve.
2	Fishing station	Kamloops division of Yale district, at the outlet of Trapp lake, S. 34, tp., 17, R. 17, W. 6th M.	"	15	Allotted by Joint Reserve Commission, July 29, 1877.
3	Fishing station	Kamloops division of Yale district, on the western shore of Trapp lake, S. 27, 34, tp. 17, R. 17, W. 6th M.	"	7	Surveyed. Reserves 1, 2, 3 and 5 are within the railway belt; it is uncertain whether No. 4 is or not.
4	Timber reserve, Gilead	Kamloops division of Yale district, on the right bank of the north fork of Thompson river, about 24 miles from its mouth.	"	180	50 inches of water from the stream next above the reserve.
5	Fishing station	Kamloops division of Yale district, on the banks of Heffley creek, a tributary of the North Thompson.	"	46	
1	Nekliptum	Yale district, near the left bank of the Fraser river, 46½ miles above Yale, on the banks of Nekliptum creek, township 13, range 26, west of the 6th meridian.	Kanaka Bar	30	25 inches of water recorded from Nekliptum creek, and all the water from all sources of water-supply on the reserve.
2	Kanaka Bar	Yale district, on the left bank of the Fraser, 47 miles above Yale, in township 13, range 27, west of 6th meridian	"	118	10 inches of water recorded from Nekliptum creek, 5 inches from Moneylux creek, and all the water from all sources of water-supply on the reserve.
3	Pegleg	Yale district, quarter mile east of reserve No. 2, in township 13, range 26, west of 6th meridian.	"	10	5 inches of water recorded from Pegleg creek.
4	Whyeek	Yale district, on the right bank of the Fraser at Kanaka Bar, 46½ miles above Yale, in township 13, range 27, west of 6th meridian.	"	351	100 inches of water recorded from Whyeek creek, all the water from a neigbouring spring, and all the water from all sources of water-supply on the reserve. The Kanaka Bar reserves are within the railway belt, they were defined by Commissioner Sproat, June 18, 1878. Surveyed, 1885. Final confirmation, June 24, 1887.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Nananahout	Kamloops division of Yale district, on the trail from Lytton to Hat creek, in township 17, ranges 26, 27, west of coast meridian.	Lytton	770	
2	Nuuautin	Kamloops division of Yale district, on the left bank of Fraser river, two miles north of Lytton, in section 13, township 15, range 27, west 6th meridian.	"	477	
3	Spintlum Flat	Kamloops division of Yale district, on the left bank of Fraser river, seven miles above Lytton, in township 16, range 27, west of 6th meridian.	"	338·50	50 inches of water recorded from two small creeks at the north end of the reserve, and all the water from all sources of water-supply on the reserve.
4	Nickle Palm	Kamloops division of Yale district, on the right bank of the Fraser, 20 miles above Lytton.	"	111	All the water recorded from Ilkuaichin creek, which forms the northwestern boundary of the reserve.
5	Seah	Kamloops division of Yale district, on the right bank of Fraser, one mile below Foster's Bar, in townships 17, 18, ranges 27, 28, west 6th meridian.	"	329	All the water from Fort Dallas creek recorded for use on this reserve. A grave-yard on the right bank of the Fraser, one mile below this reservation, is also reserved. The Lytton Indians have the privilege of fishing on both banks of the Fraser from a point one quarter of a mile north of this reserve and extending one mile down stream.
6	Nesikep	Kamloops division of Yale district, 14½ miles below Lillooet on the banks of Fraser river, in township 18, range 28, west 6th meridian.	"	1,363	100 inches of water recorded from Nesikep creek, 100 inches from Stuouck creek. The Lytton Indians have the privilege of fishing on both banks of the Fraser river within this reserve.
7	Fish Lake	Kamloops division of Yale district, at the foot of Fish lake, on Stuouck creek.	"	80	
8	Maka	Kamloops division of Yale district, in section 17, township 15, range 26, west of 6th meridian.	"	10	5 inches of water recorded from Bootahnie creek.
9	Stryen	Kamloops division of Yale district, on the right bank of the Fraser river, at Stryen creek, in township 15, range 27, west of 6th meridian.	"	629·50	250 inches of water recorded from Stryen creek, 50 inches from Nepucheen creek, and all the water from all sources of water-supply on the reserve.

10	Nkaih	Kamloops division of Yale district, on the right bank of the Fraser, one and a half miles above No. 9 reserve, in township 16, range 27, west of 6th meridian.	"	281	50 inches of water recorded from Nepucheen creek, 50 inches from Nekerkht creek.
11	Yawaucht	Kamloops division of Yale district, on the right bank of the Fraser, north of and adjoining reserve No. 10, in township 16, range 27, west of 6th meridian.	"	289·50	50 inches of water recorded from Yawaucht creek.
12	Tsaukan	Kamloops division of Yale district, on the right bank of the Fraser, 12 miles above Lytton, in section 28, township 16, range 27, west of 6th meridian.	"	141	10 inches of water recorded from Nezultco creek.
13	Cameron Bar	Kamloops division of Yale district, on the right bank of the Fraser, 13 miles above Lytton, in townships 16, 17, range 27, west 6th meridian.	"	87	75 inches of water recorded from Nkuikuet creek and all the water from all other sources of water-supply on the reserve.
14	Halhalaeden	Kamloops division of Yale district, on the left bank of the Fraser, in township 15, range 27, west 6th meridian.	"	92½	100 inches of water recorded from Halhalaeden creek, all the water from Kuaiuck creek and from all other sources of water-supply on the reserve.
15	Bootahnie	Kamloops division of Yale district, on the trail from Lytton to Hat creek, 10 miles from the former, in townships 16, 17, range 26, west 6th meridian.	"	3,840	200 inches of water from Inchawkawwisken creek and all the water from all sources of water-supply on the reserve.
16	Two Mile Creek	Kamloops division of Yale district, on the left bank of the Thompson river, 1½ miles above Lytton, in section 7, township 15, range 26, west 6th meridian.	"	11	5 inches of water recorded from Two Mile creek and all the water from all other sources of water-supply on the reserve.
17	Klahkamich	Yale district, southeast of the town of Lytton, in section 6, township 15, range 26, west 6th meridian.	"	22½	5 inches of water recorded from Lytton creek.
18	Klickkumchee	Kamloops division of Yale district, on the left bank of the Thompson river, at its confluence with the Fraser, township 15, range 26, west 6th meridian.	"	47	10 inches of water recorded from the discharge pipe of the Canadian Pacific Railway Company's station cistern, 10 inches from Lytton creek and all the water from two springs between the reserve and the Fraser river.
19	Nocten	Kamloops division of Yale district, on the right bank of the Thompson river, opposite the 61 mile post from Yale, township 15, range 26, west 6th meridian.	"	8·90	5 inches of water recorded from the creek at the northeast corner of the reserve, and all the water from all other sources of water-supply on the reserve.
20	Kitzowit	Yale district, on the Yale-Cariboo wagon road, between the 54 and 55 mile posts, in section 25, township 14, range 27, west of 6th meridian.	"	27	15 inches of water recorded from the stream flowing through the reserve and all the water from all other sources of water-supply on the reserve.
21	Inkluckcheen	Kamloops division of Yale district, 3 miles north of Lytton, in section 24, township 15, range 27, west 6th meridian.	"	181¼	50 inches of water recorded from Bitany creek and all the water from all other sources of water-supply on the reserve.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
22	Kleetlekut	Kamloops division of Yale district, to the east of and adjoining reserve No. 2, in section 18, township 15, range 26, west of 6th meridian.	Lytton	300	20 inches of water from Inchawkawwisken creek to be discharged into Bitany lake, thence to reserves No. 2 and 22, and all the water from all other sources of water-supply on the reserve.
23	Nohomeen	Kamloops division of Yale district, on the right bank of the Fraser, 1½ miles above Lytton.	"	32	50 inches of water recorded from Nohomeen creek.
24	Tuckozap	Kamloops division of Yale district, at the confluence of the Thompson and Fraser rivers, on the left bank of the latter, in township 15, ranges 26, 27, west of 6th meridian.	"	211	50 inches of water recorded from Bitany creek.
25	Nickeyeah	Yale district, on the right bank of the Fraser, 1½ miles below Lytton, in township 14, range 27, west of coast meridian.	"	246½	200 inches of water recorded from Nickeyeah creek.
26	Skwaynope	Yale district, to the south of and adjoining reserve No. 25, in township 14, range 27, west of 6th meridian.	"	237	100 inches of water recorded from Kwellanaht creek, and all the water from all other sources of water supply on the reserve.
27	Papyum	Kamloops division of Yale district, on the right bank of the Fraser, opposite Lytton, in section 1, township 15, range 27, west 6th meridian.	"	129	100 inches of water recorded from Nickeyeah creek. A grave-yard, 7 chains north of Papyum, is also reserved. The Lytton reserves are in the railway belt. Reserves 1 to 7 were allotted by Commissioner O'Reilly, August 24, 1881. Reserve No. 27 was allotted by Commissioner O'Reilly, May 21, 1886. Reserves Nos. 8 to 26 were allotted by Commissioner Sproat, July 10, 1878. Final confirmation by the Provincial Government, June 24, 1887. The reserves were surveyed in 1884, 1885, 1886.
1	Nicomen	Kamloops division of Yale district, on the left bank of the Thompson river, 68 miles from Yale, in section 17, township 15, range 25, west 6th meridian.	Nicomen	151·50	50 inches of water recorded from the stream which flows through the reserve.
2	Kykinalko	Kamloops division of Yale district, on the banks of Nicomen creek, ½ mile from its confluence with the Thompson river.	"	130	50 inches of water recorded from Nicomen creek.

3	Sackum	Kamloops division of Yale district, on the left bank of the Thompson, near the 71 mile post from Yale, townships 15, 16, range 25, west 6th meridian.	"	20	20 inches of water recorded from Sackum creek.
	Grave-yard	6 chains south of reserve No. 3.	"	1·53	Shown on plan but not in minutes of decision.
4	Skhpowtz	Kamloops division of Yale district, on the right bank of Thompson river, ¼ mile below reserve No. 3, in section 32, township 15, range 25, west 6th meridian.	"	16	20 inches of water recorded from Skhpowtz creek.
5	Klahkowit	Kamloops division of Yale district, on the right bank of the Thompson, opposite the 72 mile post from Yale.	"	197	20 inches of water recorded from Kioalulat creek.
6	Sleetsis	Kamloops division of Yale district, on the right bank of the Thompson, opposite the 74 mile post from Yale, near Drynock, section 17, township 16, range 25, west 6th meridian.	"	22	100 inches of water recorded from Sleetsis creek.
7	Sh skhost	Kamloops division of Yale district, on the right bank of the Thompson river, opposite the 67 mile post from Yale, in section 18, township 15, range 25, west of 6th meridian.	"	19	20 inches of water recorded from Shoskhost creek.
8	Unpukpulquatum	Kamloops division of Yale district, on the right bank of the Thompson, opposite the 68 mile post from Yale, and partly in section 18, township 15, range 25, west 6th meridian.	"	6·50	20 inches of water recorded from Unpukpulquatum creek.
9	Skaikut	Kamloops division of Yale district, in township 15, range 24, west of 6th meridian.	"	390	100 inches of water recorded from the lakes 3 miles south of the reserves and from the stream which flows through the lakes.
10	Squianny	Kamloops division of Yale district, 3 miles east of Drynock, in township 16, ranges 24, 25, west 6th meridian.	"	1,520	50 inches of water recorded from Squianny creek, and all the water from all other sources of water-supply on the reserve.
11	Enhalt	Kamloops division of Yale district, ¼ mile south of reserve No. 10, in township 16, range 25, west of 6th meridian.	"	140	50 inches of water recorded from the small lake at Enhalt; 50 inches from the stream flowing south-east to Skaikut.
12	Skaynaneichst	Kamloops division of Yale district, in section 15, township 16, range 24, west 6th meridian.	"	200	75 inches of water recorded from Skaynaneichst creek.
13	Naykikoulth	Kamloops division of Yale district, on the left bank of the Nicola river, in section 7, township 16, range 23, west of 6th meridian.	"	152	30 inches of water recorded from Naykikoulth creek.
14	Putkwa	Kamloops division of Yale district, on the right bank of the Thompson river, in sections 11, 14, township 15, range 26, west of 6th meridian.	"	10·50	Water record; all the water from all sources of water-supply on the reserve.

Schedule of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
15	Shuouchten	Kamloops division of Yale district, on the right bank of the Thompson, in sections 13, 14, township 15, range 26, west of 6th meridian.	Nicomen	10·50	20 inches of water recorded from Shuouchten creek. The Nicomen reserves are within the railway belt. Nos. 1 to 13 were allotted by Commissioner Sproat, July 13, 1878. Nos. 14 and 15 were reserved by Dominion Order in Council, December 2, 1895. The reserves were surveyed in 1879 and 1886.
1	Nicola Mameet	Kamloops division of Yale district, near the confluence of the Nicola river and Guichon creek.	Nicola (Lower)	11,356	300 inches of water recorded from Mameet river. Allotted by Commissioner Sproat, Sept. 5, 1878.
2	Joeyaska	Kamloops division of Yale district, in section 11, township 91.	"	320	Allotted by Commissioner Sproat, Sept. 11, 1878.
3	Pipseul	Kamloops division of Yale district, about six miles north of Mamee lake in township 17, range 21, west of 6th meridian.	"	220	Allotted by Commissioner Sproat, Sept. 5, 1878, 50 inches of water recorded from Pipseul creek. In railway belt.
4	Zoht No. 1	Kamloops division of Yale district, near the foot of Nicola lake, in township 94.	"	500	Allotted by Commissioner Sproat, Sept. 10, 1878. 50 inches of water recorded from Clapperton creek.
5	Zoht No. 2	Kamloops division of Yale district, in section 36, township 94; also known as lot 716, group 1, Yale district.	"	.....	The old Zoht reserve surrendered to the Provincial Government by Dominion Order in Council of May 16, 1899, in exchange for lot 716, group 1, Yale district. Final confirmation June 22, 1899.
6	Logan's	Kamloops division of Yale district, on Hamilton creek, (a tributary to the Nicola lake) twelve miles from its mouth.	"	45	Allotted by Commissioner Sproat, Sept. 12, 1878.
7	Hamilton Creek	Kamloops division of Yale district, on the banks of Hamilton creek, seven miles from its mouth.	"	4,400	Allotted by Commissioner Sproat, Sept. 12, 1878. 100 inches of water recorded from Teenamilst creek; 200 inches from Hamilton creek.
8	Speous	Kamloops division of Yale district, one mile southeast of the junction of the Nicola and Speous rivers, in townships 87 and 90.	"	280	100 inches of water recorded from Chiuppalst creek; 100 inches from Nuaitch creek and 100 inches from Hanuhuwiwihl creek. Allotted by Commissioner Sproat, July 23, 1879.
9	Nooaitch Grass	Kamloops division of Yale district, one mile and a half east of the Nicola river about twenty-five miles from its mouth, partly in townships 14 and 15, range 22, west of 6th meridian.	"	1,960	In the railway belt. Allotted by Commissioner Sproat, Aug. 26, 1878.
10	Nooaitch	Kamloops division of Yale district, on the banks of the Nicola river about twenty miles from its mouth, in townships 14, 15, ranges 22, 23, west of 6th meridian.	"	2,310	In the railway belt. Fifty inches of water from Nicola river with all the water from a stream running through the reserve. Allotted by Commissioner Sproat, Aug. 26, 1878.

11	Shackan	Kamloops division of Yale district, on the banks of the Nicola river about twelve miles from its mouth, in townships 15, 16, ranges 23, 24, west of 6th meridian.	.....	6,470	In the railway belt. 100 inches of water recorded from Nikikuhl creek ; 200 inches from Shhahamih creek ; 100 inches from Zasetum creek ; 200 inches from Papsilqua creek. Allotted by Commissioner Sproat, Aug. 20, 1878.
12	Soldatquo	Kamloops division of Yale district, in township 16, range 23, west of 6th meridian.	"	2,440	50 inches of water recorded from Lukatcheen creek ; 50 inches from Soldatquo creek. In the railway belt. Allotted by Commissioner Sproat, Aug. 20, 1878.
13	Papsilqua	Kamloops division of Yale district, on Papsilqua creek, in sections 12, 13, township 16, range 23, west of 6th meridian.	"	730	100 inches of water recorded from Papsilqua creek. In the railway belt. Allotted by Commissioner Sproat, Aug. 20, 1878.
					The lower Nicola reserves were surveyed in 1879.
1	Nicola Lake	Kamloops division of Yale district, on the eastern shore of Nicola lake, at its head, in townships 96 and 97.	Nicola (Upper).....	2,692	200 inches of water recorded from Nicola river.
2	Hamilton Creek Fishery or Quilchana.	Kamloops division of Yale district, on the southern shore of Nicola lake at the mouth of Hamilton or Quilchana creek, in township 97.	"	60	50 inches of water recorded from Quilchana creek.
3	Douglas Lake	Kamloops division of Yale district, at the lower end of Douglas lake, partly in township 96.	"	23 047	300 inches of water recorded from Spahamin creek. 100 inches from lake at head of Lauder creek ; 50 inches from a spring on southwest side of reserve.
4	Spahamin Creek	Kamloops division of Yale district, on Spahamin creek, about seven miles from its mouth.	"	320	50 inches of water recorded from Spahamin creek.
5	Chapperon Lake	Kamloops division of Yale district, on the western shore of Chapperon lake.	"	725	50 inches of water recorded from Murray creek.
6	Chapperon Creek Fishery	Kamloops division of Yale district, on Upper Chapperon creek, about three quarters of a mile from its mouth.	"	15	25 inches of water recorded from Upper Chapperon creek.
7	Salmon Lake	Kamloops division of Yale district, on the trail from Nicola to Grand Prairie.	"	172	Reserves Nos. 1 to 7 were allotted by Commissioner Sproat, Sept. 28, 1878, they were surveyed in 1879.
8	Spahamin Creek	Kamloops division of Yale district, between reserves Nos. 3 and 4.	"	3,857	Allotted by Commissioner O'Reilly, Oct. 10, 1889. Surveyed 1894. Final confirmation, May 7, 1895.
1	Neskainlith No. 1	Kamloops division of Yale district, on the right bank of the Thompson river, four miles below Little Shuswap lake, township 21, range 13, west of 6th meridian.	Neskainlith Halaut....	3,245	400 inches of water recorded from Neskainlith creek.
2	Neskainlith No. 2	Kamloops division of Yale district, on the left bank of the Thompson river, opposite reserve No. 1.	"	2,456	100 inches of water recorded from Chase creek.
3	Switsemalph	Kamloops division of Yale district, the central portion of Switsemalph reserve on Salmon arm of Shuswap lake, in township 20, range 10, west of 6th meridan.	"	1,295	Two reserves on the Salmon arm were allotted by Joint Reserve Commission to the Neskainlith, Adams lake and Little Shuswap lake tribes in common. They have since been divided by the Indian agent among the several bands interested. The Neskainlith reserves are within the railway belt ; they were allotted by Joint Reserve Commission, August 13, 1877, and surveyed 1881 and 1885.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	North Thompson	Kamloops division of Yale district, on the left bank of the North Thompson river about forty-five miles from Kamloops.	North Thompson and Canoe Lake.	3,220	50 inches of water recorded from Newkykwatston creek ; 50 inches from Cukchuqualk creek.
2	Nehalliston	Lillooet district, near the fort, and opposite Nehalliston creek, fifty miles above Kamloops.	"	5	5 inches of water recorded from Silpahan creek.
3	Barriere River	Kamloops division of Yale district, on the left bank of Barriere river, a quarter of a mile from its confluence with the North Thompson, thirty-eight miles above Kamloops.	"	6	5 inches of water recorded from Barriere river. Allotted by Joint Reserve Commission, July 5, 1877. Surveyed, 1878.
4	Lewis Creek	Kamloops division of Yale district, on the left bank of Lewis creek, about a quarter of a mile from its confluence with the North Thompson, about thirty-five miles above Kamloops.	"	8	5 inches of water recorded from Louis creek.
1	Okanagan	Osooyoos division of Yale district, at the head of Okanagan lake.	Okanagan	25·539	100 inches of water recorded from Siwash creek ; 100 inches from Six Mile creek ; 35 inches from Louis creek ; 150 inches from O'Keefe's creek ; 75 inches from White Man's creek.
2	Otter Lake	Osooyoos division of Yale district, on the shore of Otter lake, in section 23, township 7.	"	62	
3		Osooyoos division of Yale district, the southwest quarter, section 13, township 7.	"	160	
5	Swan Lake	Osooyoos division of Yale district, in sections 26 and 35, township 8, on the northern shore of Swan lake.	"	68	Allotted by Joint Reserve Commission, October 15, 1877. Surveyed, 1880.
5	Long Lake	Osooyoos division of Yale district, on the northern shore of Long lake, a portion of section 22, township 9.	"	128	
6	Priest's Valley	Osooyoos division of Yale district, at the head of the south arm of Okanagan lake, in section 30, township 9.	"	83	
7	Duck Lake	Osooyoos division of Yale district, on the northern shore of Duck lake, in townships 20 and 23.	"	457	
8	Mission Creek	Osooyoos division of Yale district, on the banks of Mission creek, portions of sections 5, 6, 7 and 8, township 26.	"	55	Allotted by Joint Reserve Commission, October 15, 1877. Surveyed, 1880.

9	Tsinstikeptum	Osooyoos division of Yale district, on the western shore of Okanagan lake, in township 25.	"	2,438	Allotted by Commissioner O'Reilly, October 19, 1888. Surveyed 1889. Final confirmation, April 28, 1891.
10		Osooyoos division of Yale district, on the western shore of Okanagan lake, 3½ miles north of reserve No. 9.	"	800	
1	Hay Meadow	Kamloops division of Yale district, at the head of Venables valley, section 15, township 19, range 25, west of 6th meridian.	Oregon Jack Creek	30	Allotted by Commissioner Sproat, August 3, 1878. Surveyed, 1885. Final confirmation, June 24, 1887. 100 inches of water recorded from Oregon Jack creek. The Oregon Jack Creek Indians have the privilege of salmon fishing on both banks of the Thompson river, from quarter mile above the mouth of Oregon Jack creek, down stream a distance of two miles.
2		Kamloops division of Yale district, at the forks of Oregon Jack creek, in section 21, township 19, range 25, west of 6th meridian.	"	35	
3	Oregon Jack Creek	Kamloops division of Yale district, on the right bank of the Thompson river, at the mouth of the Oregon Jack creek.	"	120	
4	Nepa	Kamloops division of Yale district, on the left bank of the Thompson river at Nelson creek, in section 32, township 19, range 24, west of 6th meridian.	"	322	
5		Kamloops division of Yale district, on the right bank of the Thompson river, to the south of and adjoining reserve No. 3, in township 19, ranges 24 and 25, west of 6th meridian.	"	1,043	Allotted by Commissioner O'Reilly, August 12, 1881. Surveyed, 1885. Final confirmation, June 24, 1887.
6		Kamloops division of Yale district, on Nelson creek, in townships 19 and 20, range 23, west of 6th meridian.	"	750·70	Allotted by Commissioner O'Reilly, May 19, 1886. Surveyed, 1885. Final confirmation, June 24, 1887.
7		Kamloops division of Yale district, south of reserve No. 6, in section 21, township 19, range 24, west of 6th meridian.	"	80	
1	Osooyoos	Osooyoos division of Yale district, at the head of Osooyoos lake, portions of townships 48, 49, 50 and 51.	Osooyoos	32·097	50 inches of water recorded from A-tsi-hlak creek; 100 inches from Wolf creek and 300 inches from Gregoire creek.
2	Dog Lake	Osooyoos division of Yale district, on the banks of Okanagan river, at the outlet of Dog lake, in township 86.	"	71	The Osooyoos reserves were allotted by Joint Reserve Commission, Nov. 21, 1877. Surveyed, 1889. Final confirmation April 28, 1891.
1	Penticton	Osooyoos division of Yale district, at the foot of Okanagan lake, partly in township 88.	Penticton	47·829	100 inches of water recorded from Trout creek; 100 inches from Snake creek, and 60 inches from Marron creek. Reserve No. 1 was allotted by Joint Reserve Commission, November 24, 1877. Surveyed, 1889. Final confirmation, July 10, 1895.
2	Timber reserve	Osooyoos division of Yale district, township 87, between Okanagan and Dog lakes.	"	321	Allotted by Commissioner O'Reilly, July 31, 1893 The southern portion of reserve No. 2, as allotted by Joint Reserve Commission, Nov. 24, 1887, was surrendered July, 1893. Surveyed 1889. Final confirmation, July 10, 1895.
2A	"	To the west of and adjoining reserve No. 2.	"	194	Conveyed by Mr. Thomas Ellis to the Crown, Sept. 21, 1894. Surveyed, 1889. Final confirmation, July 10, 1895.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Quaaout	Kamloops division of Yale district, north of Little Shuswap lake, and on the right bank of Adams creek at its mouth, in township 22, range 12, west of 6th meridian.	Little Shuswap Lake (Knaut).	4,265	One hundred inches of water recorded from Adams river, 25 inches from a lake at the southwest corner of the reserve, and all the water from all other sources of water-supply on the reserve.
2	Chum Creek	Kamloops division of Yale district, at the southeast corner of Little Shuswap lake, in township 22, range 12, west of 6th meridian.	" " ..	600	Fifty inches of water from Jim's or Trail creek, and all the water from all other sources of water-supply on the reserve.
3	Meadow	Kamloops division of Yale district, in section 25, township 21, range 12, west of 6th meridian.	" " ..	60	Allotted by Joint Reserve Commission, August 14, 1877. Surveyed, 1878 and 1884. Final confirmation, October 28, 1891.
4	Scotch Creek	Kamloops division of Yale district, on the right bank of the Great Shuswap lake, at the mouth of Scotch creek, in townships 22, 23, range 11, west of 6th meridian.	" " ..	2,105	One hundred inches of water recorded from Scotch creek, 50 inches from Adams river, and all the water from all other sources of water-supply on the reserve.
5	North Bay	Kamloops division of Yale district, at the head of North bay, Salmon arm of Shuswap lake, at Tappen siding, in township 21, range 10, west of 6th meridian.	" " ..	810	Twenty-five inches of water recorded from Skatkua creek, 25 inches from Skukukum creek, and all the water from all other sources of water-supply on the reserve. Two reserves on the Salmon arm were allotted August 16, 1877, by Joint Reserve Commission to the Neskainlith, Adams lake and Little Shuswap lake tribes in common. They have since been divided by the Indian agent among the several bands interested.
1	.....	Osooyoos division of Yale district, on the left bank of the Similkameen river, in sections 4 and 9, township 52.	Lower Similkameen.....	.....	Disallowed by the Provincial government, April 28, 1891. Cancelled by Commissioner O'Reilly, August 9, 1893.
2	.....	Osooyoos division of Yale district, on the left bank of the Similkameen.	" "	208	
3	.....	Osooyoos division of Yale district, on both banks of the Similkameen, adjoining reserve No. 2 on the south.	" "	1,750	
4	Narcisse's Farm	Osooyoos division of Yale district, on the right bank of the Similkameen river, opposite reserves Nos. 2 and 3, 9 miles north of the international boundary line.	" "	1,854	Forty inches of water recorded from Sintlehahtan creek.
5	Joe Nahumcheen	Osooyoos division of Yale district, on both banks of the Similkameen, to the south of and adjoining reserve No. 3.	" "	1,278	Ten inches of water recorded to be taken out of a spring at the back of Joe Nahumcheen's farm. One hundred inches of water from the Similkameen river.

6	Blind Creek	Osooyoos division of Yale district, part of sections 11 and 14, township 52.	"	"	.....	
7 & 8	Skemeoskuankin	Osooyoos division of Yale district, on the right bank of the Similkameen river, north of and adjoining the international boundary line.	"	"	3,800	One hundred inches of water recorded from Skemeoskuankin creek.
9	Alexis	Osooyoos division of Yale district, on the left bank of the Similkameen river, five miles above Keremeos.	"	"	429	One hundred inches of water recorded from Achegheptlat creek.
10	Ashnola	Osooyoos division of Yale district, on the right bank of the Similkameen river, at its confluence with the Ashnola river.	"	"	4,153	One hundred inches of water recorded from Ashnola river and 50 inches from Jim's creek.
10A	"	On the right bank of the Similkameen river, to the north of and adjoining reserve No. 10.	"	"	3,724	
10B	"	On the right bank of the Similkameen river, to the south of and adjoining reserve No. 10	"	"	411	
11	Ashnola John's	Osooyoos division of Yale district, on the right bank of the Similkameen river, 13 miles above Keremeos.	"	"	585	One hundred inches of water recorded from Sinthutsepaskan creek.
12		Osooyoos division of Yale district, on Keremeos creek, about 14 miles from Keremeos, on the Keremeos to the Penticton wagon road.	"	"	150	Reserves Nos. 1, 2, 7, 8, 9, 10, 11 and 12 were allotted by Commissioner Sproat, October 12, 1878. No. 3 was allotted by Commissioner O'Reilly, September 22, 1884. Nos. 4, 5 and 6 were allotted by Commissioner O'Reilly, October 30, 1888. Nos. 10A, 10B and 12A were allotted by Commissioner O'Reilly, August 9, 1893.
12A		On Keremeos creek, to the north and west of reserve No. 12, and adjoining the same.	"	"	1,130	Reserves 7, 8, 9, 10 and 11 finally confirmed, April 28, 1891. Reserves 2, 3, 4, 5, 6, 12, 10A, 10B and 12B, confirmed, June 8, 1895.
1	Vermilion Forks	Osooyoos division of Yale district, at Vermilion forks on the Similkameen river, near Princeton.	Similkameen (Upper)		21	
2	Chuchuwayha	Osooyoos division of Yale district, on the banks of the Similkameen, at 20-Mile creek, 20 miles below Princeton.	"		4,130	200 inches of water recorded from Similkameen river. 100 inches of water recorded from 20-Mile creek. 100 inches of water recorded from Nkansiko, Aksspepaptsin and Chuchuwayha creeks. 100 inches recorded from Nkamahinat creek.
2A	"	To the west of and adjoining reserve No. 2.	"		1,400	
2B	"	On the right bank of the Similkameen, to the west of and adjoining reserve No. 2.	"		175	
3	Wolf Creek or Yakhlkaywalick	Osooyoos division of Yale district, on the right bank of the Similkameen, at the mouth of Wolf creek, 9 miles from Princeton.	"		505	100 inches of water recorded from Wolf creek.
4	Nine Mile Creek	Osooyoos division of Yale district, on the left bank of the Similkameen, at the mouth of 9-Mile creek, opposite reserve No. 3.	"		250	30 inches of water recorded from 9-Mile creek.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
5	Lulu	Osooyoos division of Yale district, on the left bank of the Similkameen river, about 12 miles from Princeton.	Similkameen (Upper)	52	100 inches of water recorded from Lula-a-lauh creek.
6		Kamloops division of Yale district, on the trail from Princeton to Nicola, and about 12 miles distant from the former.	"	20	Reserves Nos. 1, 5 and 6 allotted by Commissioner Sproat, October 5, 1878.
7	Iltcoola	Osooyoos division of Yale district, on the left bank of the Similkameen river, about 11 miles below Princeton.	"	30	Reserve No. 2 allotted by Commissioner O'Reilly, October 26, 1888. Reserves Nos. 3, 4, 7, 2A and 2B allotted by Commissioner O'Reilly, August 5, 1893. These reserves have not been surveyed.
1	Kupchynalth (Upper)	Yale district, about 8 miles south of Lytton, in section 30, township 13, range 26, west of 6th meridian.	Siska Flat	20	20 inches of water recorded from Kupchynalth creek, and all the water from all other sources of water-supply which may be found on the two Kupchynalth reserves.
2	Kupchynalth (Lower)	Yale district, on the left bank of the Fraser river, about 8 miles below Lytton, in section 25, township 13, range 27, west of 6th meridian.	"	$15\frac{50}{100}$	
3	Siska Flat	Yale district, on the left bank of the Fraser, about 7 miles below Lytton, in section 36, township 13, range 27, west of 6th meridian.	"	91	50 inches of water recorded from Siska creek, and from any other sources that may be found available, including a spring on the hillside.
4	Grave-yard	Yale district, on the Cariboo wagon road, $7\frac{1}{2}$ miles south of Lytton, in section 30, township 13, range 26, west of 6th meridian.	"	$\frac{62}{100}$	
5	Zacht	Yale district, on the Cariboo wagon road, $6\frac{1}{2}$ miles south of Lytton, in section 1, township 14, range 26, west of 6th meridian.	"	60	75 inches of water recorded from Siska creek and all the water from all sources of water-supply on the reserve.
6	Humhampt	Yale district, about $5\frac{1}{2}$ miles below Lytton, near the right bank of the Fraser.	"	10	20 inches of water recorded from Humhampt creek, and all the water from all other sources of water supply on the reserve.
7	Nahamanak	Yale district, at the Canadian Pacific railway bridge across the Thompson, about 7 miles below Lytton, in section 36, township 13, range 27, west of 6th meridian.	"	362	50 inches of water recorded from Hyumatko creek, 50 inches of water recorded from N-tlah-tla-pat-ko creek, and all the water from all othar sources of water-supply on the reserve. The Siska Flat reserves were allotted by Commissioner Sproat, June 18, 1878. Surveyed, 1885. Final confirmation, June 24, 1887. All these reserves are within the railway belt.

1	.....	Yale district, ½ mile east of Fraser river and 4½ miles south of Lytton, in section 13, township 14, range 27, west of 6th meridian.	Skuppah	20	15 inches of water recorded from Skuppah creek, and all the water from all other sources of water-supply on the reserve.
2	Inklyukkinatko	Yale district, on the left bank of the Fraser, 3 miles below Lytton, in section 24, township 14, range 27, west of 6th meridian.	"	169	20 inches of water recorded from Inklyukkinatko creek, and all the water from all other sources of water-supply on the reserve.
3	Pooeyelth	Yale district, near the right bank of the Fraser, 5 miles below Lytton, in section 11, township 14, range 27, west of 6th meridian.	"	20	40 inches of water recorded from Pooeyelth creek, and all the water from all other sources of water-supply on the reserve.
4	Skuppah	Yale district, on the left bank of the Fraser, below Skuppah creek, 4 miles below Lytton, in section 13, township 14, range 27, west 6th meridian.	"	59	25 inches of water recorded from Skuppah creek, and all the water from all other sources of water-supply on the reserve.
					These reserves are all in the railway belt. They were allotted by Commissioner Sproat, June 18, 1878; surveyed in 1885, and finally confirmed June 24, 1887.
1	Salmon River	Kamloops division of Yale district, on the right bank of Salmon river, in township 34.	Spallumcheen	3,853	Allotted by Joint Reserve Commission, September, 3, 1877. Surveyed, 1880.
2	Enderby	Kamloops division of Yale district, on both banks of the Spallumcheen river, in townships 35, 37 and 38.	"	5,625	
....	Grave-yard	In Mr. Fortune's field, south of the Spallumcheen river, in township 38.	"	0·75	
3	Sicamous	Kamloops division of Yale district, on the western shore of Mara lake, the fractional quarter of section 25 and the northeast quarter of section 26, township 21, range 8, west of sixth meridian.	"	201	In the railway belt. Allotted by Comm'r O'Reilly, Aug. 11, 1893. Not surveyed.
1	Spuzzum	Yale district, on the right bank of the Fraser river, 9 miles north of Yale, in sections 13, 14, 23, 24, township 8, range 26, west of 6th meridian.	Spuzzum	302	227 acres of this reserve were allotted by Comm'r Sproat, May 21, 1878; 75 acres additional were allotted by Comm'r. O'Reilly, April 26, 1884. 200 inches of water recorded from Spuzzum creek, 50 inches from the creek west of the reserve, 50 inches from the creek one mile below the reserve, and all the water from all other sources of water-supply on the reserve.
2	Papsilqua	Yale district, 11 miles north of Yale, in sections 25, 36, township 8, range 26, west 6th meridian.	"	41	20 inches of water recorded from the stream which runs into the lake on the reserve.
3	Teequaloose	Yale district, ¼ mile southwest of the Suspension bridge, in section 2, township 9, range 26.	"	19	25 inches of water recorded from the stream which flows through the reserve.
4	Yelakin	Yale district, on the left bank of the Fraser, 16 miles above Yale, in section 23, township 9, range 26, west of sixth meridian.	"	72·50	All the water recorded from all sources of water supply on the reserve.
5	Long Tunnel	Yale district, on the right bank of the Fraser, 15 miles from Yale, in township 9, range 26, west of 6th meridian.	"	8	All the water from the small stream which flows through the reserve, and all the water from all other sources of water-supply on the reserve.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KAMLOOPS-OKANAGAN AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
6	Skuet	Yale district, on the left bank of the Fraser, ¾ mile below the Suspension bridge, in section 36, township 8, range 26, west 6th meridian.	Spuzzum	13·50	All the water recorded from the two streams which flow through the reserve. All these reserves are within the railway belt, Nos. 2, 3, 4, 5 and the southern portion of No. 6 were allotted by Comm'r Sproat, May 21, 1877. The northern portion of No. 6, was allotted by Comm'r O'Reilly, April 26, 1884. Surveyed, 1882, 1884. Final confirmation, May 1, 1886.
1	Coldwater	Kamloops division of Yale district, on the banks of the Coldwater river, about 4 miles from its mouth.	Lower Nicola, Spuzzum, Boston Bar, Boothroyd, Siska, Upper Similkameen, in common.	4,640	
2	Paul's Basin	Yale district, on the left bank of the Coldwater river, about 12 miles from its mouth.		1,594	100 inches of water recorded from the stream flowing through the reserve.
3	Meadow	Kamloops division of Yale district, about 4 miles east of reserve No. 1.		42·50	20 inches of water recorded from the stream running into the lake on the reserve. Allotted by Commissioner Sproat, Sept. 11, 1878. Surveyed, 1886. Final confirmation, May 8, 1889.

KOOTENAY AGENCY, BRITISH COLUMBIA.

1	Kootenay, East	Kootenay district, on the right bank of the Kootenay river at the mouth of St Mary's river.	Kootenay	17,425	Allotted by Commissioner O'Reilly, August 20, 1884. Surveyed, 1866. Final confirmation, June 10, 1887.
2	Tobacco Plains, East	Kootenay district, in Kootenay valley, adjacent to the international boundary line.	"	10,560	Allotted by Commissisner O'Reilly, July 18, 1884. Surveyed, 1886. Final confirmation, June 10, 1887.
3	Columbia Lake, East	Kootenay district, in the Columbia valley, between the lower Columbia lake and the Rocky mountains.	"	8,456	Allotted by Commissioner O'Reilly, August 9, 1884. Surveyed, 1886. Final confirmation, June 10, 1887.
4	Isidores Ranch, East	Kootenay district, in the Kootenay valley	"	680	Allotted by Commissioner O'Reilly, September 27, 1887. Surveyed 1888. Final confirmation, July 27, 1888.
5	Cassimayooks, East	" "	"	160	
6	Bummers Flat, East	Kootenay district, on the left bank of the Kootenay river, 3 miles above the mouth of St. Mary's river.	"	190	

	Lower Kootenay	West Kootenay district, on the right bank of the Kootenay river, about 3 miles north of the international boundary line.	Lower Kootenay	1,831·50	Allotted by Commissioner O'Reilly, August 28, 1884. Surveyed, 1886. Final confirmation, June 10, 1887.
	Shuswap	East Kootenay district, on the right bank of the Columbia river, opposite the mouth of Toby creek.	Shuswap, Kinbasket's band.	2,759	Allotted by Commissioner O'Reilly, August 14, 1884, Surveyed, 1886. Final confirmation, June 10, 1887.

KWAWKEWLTH AGENCY.

1	Fort Rupert or Tsa-kis	Rupert district, Beaver harbour, Vancouver island.	Fort Rupert Kwawkewlth	4 25	Allotted by Commissioner O'Reilly, September 18, 1886. Surveyed, 1887. Final confirmation, July 27, 1888.
2	Kip-pase	Rupert district, Beaver harbour, about 7 chains west of reserve No. 1.	"	34	
3	Shell Island	Rupert district, Beaver harbour, about one mile north of reserve No. 1.	"	0·70	
4	Tsul-qua-te	Rupert district, on the western shore of Hardy bay.	"	38·70	
5	Thomas Point	Rupert district, at Thomas point, about one mile east of Fort Rupert.	"	42·30	
6	Keogh	Rupert district, at the mouth of the Keogh river, about 2½ miles east of Fort Rupert.	"	4·50	
7	Klickseewy	Rupert district on Queen Charlotte sound, about 12 miles southeast of Fort Rupert and east of section 9.	Kwawkewlth	134·80	
1	Gwayasdums	Coast district, on the western shore of Gilford island, Retreat passage.	Gilford Island ; Tsah-waw-ti-neuch.	62·90	
1	Burial-ground	At northern extremity of Sail island.	Ah-kwaw-ah-mish	0·85	
2	Kunstamis	Coast district, on the mainland of British Columbia, on northern shore of Claydon bay.	Kwaw-waw-i-nuck	17·20	
3	Keogh	Coast district, at the eastern extremity of Mackenzie sound.	"	10·50	
4	Quay	Coast district, on the western shore of Nimmo bay, Mackenzie sound.	"	10	Allotted by Commissioner O'Reilly, September 25, 1886. Surveyed, 1887. Final confirmation, July 27, 1888.
5	Lawanth	Coast district, on the southern shore of Embley lagoon.	"	14	
6	Gleyka	Coast district, on the eastern shore of Actæon sound, half a mile from its head.	"	8	
7	Quaee	Coast district on the Tsah-waw-ti-neuch river, at the head of Kingcome inlet.	"	432	
8	Alalco	Coast district, on the Ah-kwaw-ah-mish river, at the head of Wakeman sound.	"	293·20	
9	Grave-yard	Coast district, on the eastern shore of Wakeman sound, near its head.	"	4	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KWAWKEWLTH AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Telaise	Rupert district, 2½ miles north of Klaskino inlet, ½ mile northeast of May Day island.	Klaskino	48	Allotted by Commissioner O'Reilly, July 9, 1889. Surveyed 1892. Final confirmation, May 27, 1893.
2	Tsowenachs	Rupert district, ½ mile east of Anchorage island, Klaskino inlet.	"	55	
3	Klaskish	Rupert district, ½ mile east of Shelter island, Klaskish inlet.	"	12½	
1	Tsauwati	Coast district, at the mouth of Tsauwati river, at the head of Knights inlet.	Knights Inlet, Tanockteuch and Ahwaheettlala bands.	404	Allotted by Commissioner O'Reilly, October 2, 1886. Surveyed, 1887. Final confirmation, July 27, 1888.
2	Keogh	Coast district, on the eastern shore of Glendale cove, Knights inlet.	" "	108·20	
3	Kwatse	Coast district, ½ mile south of Macdonald point, Knights inlet.	" "	51	
4	Grave-yard	Coast district, at Macdonald point, Knights inlet.	" "	5½	
1	Salmon River	Sayward district, at the mouth of Salmon river, Johnstone strait.	Laichkwiltach, Kahkahmatsis band.	329	
2	Homayno	Coast district, at the head of Heydon bay, Loughborough inlet.	We-way-akum and Kweahkah bands.	38	
3	Loughborough	Coast district, on the eastern shore of Loughborough inlet, opposite Williams point.	" "	21	
4	Matlaten	Coast district on Cardero channel, opposite Greene point.	" "	96	
5	Matsayno	Coast district, on the eastern shore of Philipps arm, at its head.	" "	118½	Allotted by Commissioner O'Reilly, October 8, 1886. Surveyed, 1888. Final confirmation, May 18, 1889.
6	Saaiyouck	Coast district, on the north shore of Cardero Channel, one mile west of Arran rapids.	" "	51½	
7	Village Bay	Sayward district, on the west shore of Village bay, Sutil channel.	We-way-akay band.	11	
8	Open Bay	Sayward district, on the northwest shore of Open bay, Valdez island.	" "	9	
9	Drew Harbour	Sayward district, Drew harbour, Valdez island.	" "	240½	
10	Cape Mudge	Sayward district, Cape Mudge, Valdez island.	" "	1,117½	
11	Campbell River	Sayward district, at the mouth of Campbell river, Discovery passage.	" "	350½	Allotted by Mr. Ashdowne Greene, under special authority from the Provincial and Dominion Governments, May 7, 1888. Surveyed, 1888. Final confirmation, May 18, 1889.
12	Quinsam	Sayward district, on the right bank of Quinsam river, about one mile from its confluence with Campbell river.	" "	287½	

1	Etsekin	Coast district, on the eastern shore of Havannah channel, opposite the northern end of Hull island.	Mahteelthpe	32½	
2	Keecekiltum, or Port Harvey.	Coast district, on the eastern shore of Port Harvey, Cracroft island, opposite the southern end of Mist island.	"	29	Allotted by Commissioner O'Reilly, October 5, 1886. Surveyed, 1887. Final confirmation, May 18, 1889.
3	Haylahte	Rupert district, at the mouth of Adams river, Johnstone strait.	"	47	
4	Port Neville, or Harkhom	Coast district, on the northern shore of Port Neville, at its head.	"	36·70	
1	Kequesta	Coast district, on the northern shore of Seymour inlet, 10 miles from its mouth.	Nahkwockto	174	Allotted by Commissioner O'Reilly, July 31, 1882. Surveyed, 1889. Final confirmation, April 28, 1891.
2	Grave-yard	Coast district, a rock in Nugent sound, ¼ mile south of reserve No. 1.	"	0·16	
3	Pahas	Coast district, on the northern shore of Blunden harbour, Queen Charlotte sound.	"	98	
4	Mahpahkum	Coast district, at the northern extremity of Deserters island, Queen Charlotte sound.	"	19	
5	Ta-a-ack	Coast district, one of the storm group of islands, Queen Charlotte sound.	"	34	
6	Saagoombahlah	Coast district, on the eastern shore of Schooner passage, Seymour inlet, ½ mile south of Nahkwockto rapids.	"	4½	Allotted by Commissioner O'Reilly, Augnst 17, 1888. Surveyed 1889. Final confirmation, April 28, 1891.
7	Burial-ground	Coast district, an island in the centre of Nahkwockto rapids, Seymour inlet.	"	0·80	
8	"	Coast district, on the northern shore of Seymour inlet, ½ mile north of Nahkwockto rapids.	"	0·45	
9	Kwetahkis	Coast district, at the head of Nenahlmai lagoon, Seymour inlet.	"	10	
10	Owh-wis-too-a-wan	Coast district, at the mouth of Frederick sound, Seymour inlet, on its southern shore.	"	13	
11	Peneece	Coast district, at the head of Wigwam bay, Seymour inlet.	"	8	
12	Wawwat'l	Coast district, on the right bank of the Wawwat'l river, Seymour inlet, about 1½ mile from its mouth.	"	165	
13	Tsai-kwi-e	Coast district, on the northern shore of Village bay, Mereworths sound.	"	11	Allotted by Commissioner O'Reilly, August 17, 1888. Surveyed, 1889. Final confirmation, April 28, 1891.
14	Ko-kwi-iss	Coast district, on the eastern shore of Alison sound, near its mouth.	"	15	
15	Kai-too-kwis	Coast district, on the northern shore of Alison sound, 3 miles north of reserve 14.	"	51	
16	Waump	Coast district, at the head of Alison sound	"	92	
17	Pel-looth'l-kai	Coast district, at the head of Belize inlet	"	4	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

KWAWKEWLTH AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Hope Island	Rupert district, Queen Charlotte sound.	Nahwitti	8552	
2	Semach	Rupert district, Sea Otter cove, Vancouver island.	"	6	
3	Ouchtum	Rupert district, at Cape Scott, Vancouver island.	"	12	Allotted by Commissioner O'Reilly, September 17, 1886. Surveyed, 1888. Final confirmation, May 18, 1889.
4	Nahwitti	Rupert district, at Cape Commerell, Vancouver island.	"	22	
5	Glen-gla-ouch	Rupert district, at the southern end of Balaklava island, Goletas channel.	"	14	
1	Alert Bay	Rupert district, Alert bay, Cormorant island	Nimkeesh	$46\frac{25}{100}$	Allotted by Commissioner O'Reilly, October 20, 1884. Surveyed, 1887. Final confirmation, July 27, 1888.
2	Burial-ground	Rupert district, Alert bay, 30 chains south of reserve No. 1.	"	$1\frac{87}{100}$	
3	Ches-la-kee	Rupert district, at the mouth of Nimkeesh river, Broughton strait.	"	$302\frac{87}{100}$	
4	Arse-ce-wy-ee	Rupert district, on the left bank of the Nimkeesh river, $2\frac{1}{2}$ miles from its mouth.	"	$41\frac{30}{100}$	Allotted by Commissioner O'Reilly, September 21, 1886. Surveyed, 1887. Final confirmation, July 27, 1888.
5	O-tsaw-las	Rupert district, on the right bank of the Nimkeesh river, $\frac{1}{2}$ mile from the outlet of Karmutsen lake.	"	$53\frac{25}{100}$	
1	Quattishe	Rupert district, near Turn point, at the southern end of Quatsino narrows, Quatsino sound.	Quatsino	228	
2	Toh-quo-eugh	Rupert district, two small islets in the west arm of Quatsino sound.	"	$1\frac{50}{100}$	
3	Pa-cat'l-lin-ne	Rupert district, on the west arm of Quatsino sound, two miles from its head.	"	9	
4	Kultah	Rupert district, at James point, on the eastern shore of Quatsino narrows.	"	41	
5	Cayilth	Rupert district, at the head of the southeast arm of Quatsino sound.	"	$11\frac{50}{100}$	Allotted by Commissioner O'Reilly, July 15, 1889. Surveyed, 1892. Final confirmation, June 20, 1893.
6	Cayuse	Rupert district, on the western shore of the southeast arm of Quatsino sound, west of the northern extremity of Long island.	"	94	
7	Teeta	Rupert district, on the western shore of the southeast arm of Quatsino sound, one mile southwest of Dog island.	"	$9\frac{50}{100}$	
8	Mah-te-nicht	Rupert district, in Koskeemo bay, Quatsino sound.	"	39	

9	Clatux	Rupert district, on the eastern shore of Koprino harbour, Quatsino sound.	"	73	
10	Fishery	Rupert district, on the northern shore of Koprino harbour, Quatsino sound.	"	111	Allotted by Commissioner O'Reilly, July 15, 1886. Surveyed, 1892. Final confirmation, June 20, 1893.
11	O-ya-kum-la	Rupert district, on the eastern shore of Forward inlet, Quatsino sound.	"	165	
12	Quatleyo	Rupert district, on the southern shore of Browning creek, Forward inlet.	"	6	
13	Grass Point	Rupert district, at Grass point, Winter harbour, a portion of section 3, and formerly within the townsite of 'Queenstown.'	"	$8\frac{50}{100}$	Conveyed by Captain John Thompson to Her Majesty the Queen, June 14, 1893.
14	Clienna	Rupert district, on the northern shore of Winter harbour, a portion of section 10.	"	50	Conveyed by McNiff, *et al.*, to Her Majesty the Queen, August, 1895.
15	Grave-yard	Rupert district, an island in Winter harbour, ten chains south of reserve No. 14.	"	3	Allotted by Commissioner O'Reilly, July 15, 1889. Surveyed, 1892. Final confirmation, June 20, 1893.
16	Ah-we-cha-ol-to	Rupert district, at the head of Winter harbour, on its southern shore.	"	74	
1	Wyctese	Coast district, on the southern shore of Smith's inlet, about 20 miles from its mouth, and on the left bank of the Sammo river.	Quawshelah	551	The right to fish in the Sammo river for 2 miles above tidal water is reserved for these Indians.
2	Nekite	Coast district, on the right bank of the Nekite river, at the head of Smith's inlet.	"	165	Allotted by Commissioner O'Reilly, August 3, 1882. Surveyed, 1889. Final confirmation, April 28, 1891.
1	Karlukwees	Coast district, on the southern shore of Turnour island, Beware passage.	Turnour Island	26·75	Allotted by Comm'r. O'Reilly, Oct. 2, 1886. Surveyed, 1887. Final confirmation, July 27, 1888.
1	Mahmalillikullah	Coast district, on the western shore of Village island, Elliot passage.	Village Island	434·25	Allotted by Comm'r. O'Reilly, Sept. 29, 1886. Surveyed, 1888. Final confirmation, July 27, 1888.
2	Meetup	Coast district, at the head of Viner sound	"	15·75	
3	Ahta	" at the mouth of Ahta river, at the head of Bond sound.	"	17·50	
4	Kakweken	Coast district, at the mouth of Kakweken river, at the head of Thompson sound.	"	10	
5	Dead Point	Coast district, at Dead point, Harbledown island.	"	97	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

NORTHWEST COAST AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Bella Bella	Coast district, on Campbell island, in McLaughlin bay.	Bella Bella	1,625	
1A	Burial-ground	Coast district, on Denny island, on eastern shore of Plumper channel, opposite reserve No. 1.	"	17	
2	Hoonees	Coast district, on the western shore of Roscoe inlet, near its mouth.	"	21	
3	Quartcha	Coast district, at the mouth of Quartcha river, Roscoe inlet.	"	32	
4	Noota	Coast district, at the mouth of Noota river, near the head of Roscoe inlet.	"	16·50	
5	Clatse	Coast district, at the mouth of Clatse river, Roscoe inlet.	"	222	Allotted by Comm'r. O'Reilly, Aug. 25, 1882.
6	Elcho	Coast district, on the left bank of Elcho river, Dean canal.	"	80	Surveyed, 1888. Final confirmation, May 18, 1889.
7	Kisameet	Coast district, on King island, Fisher channel, at the mouth of Kisameet river.	"	13	
8	Howeet	Coast district, at the mouth of Howeet river, Lama passage, Hunter island.	"	610	
9	Kunsōot	Coast district, at the mouth of Kunsoot river, Gunboat passage, Denny island.	"	95	
10	Jajustus	Coast district, on northern shore of Denny island, Gunboat passage.	"	16·50	
11	Werkinellek	Coast district, Goose islands, about 25 miles southwest of Bella Bella.	"	63	
12	Yellertlee	Coast district, on the Goose islands, about ½ mile northeast of reserve No. 11.	"	161·50	
	Bella Boola	Coast district, at the head of the North Bentinck arm, Burke's channel.	Bella Coola	3,363	
2	Nooseseck	Coast district, at the mouth of Nooseseck river, 1 mile north of Loiyence point, North Bentinck arm.	"	13	Allotted by Comm'r. O'Reilly, Aug. 11, 1882. Surveyed, 1888.
3	Taleomy	Coast district, on the Taleomy river, near the head of South Bentinck arm.	"	500	
4	Kwatlena	Coast district, on the Kwatlena river, about 6 miles east of Bentinck arm.	"	131	
1	Kemsquit	Coast district, at the mouth of the Kemsquit river, Dean canal.	Kemsquit	502	Allotted by Comm'r. O'Reilly, August 14, 1882. Surveyed, 1888. Final confirmation, May 18, 1889.
	Chatscah	Coast district, on the Chatscah river, at the head of Dean canal.	"	428	
1	Kitasoo	Coast district, on Swindle island, in Trout bay, Klemtoo passage.	Kitasoo	812	

2	Canoona	Coast district, on Princess Royal island, on the western shore of Graham reach.	"	542	The Kitasoo Indians have the privilege of fishing in the Canoona river for a distance of two miles from its mouth.
1	Kitimat	Coast district, on the left bank of Klaklalisha river, Douglas channel, ½ mile from its mouth.	Kitimat	467	
	Kitimat	Coast district, on the eastern shore of Douglas channel, 3 miles south of reserve No. 1.	"	386	Allotted by Comm'r. O'Reilly, July 24, 1889. Surveyed, 1891. Final confirmation, May 4, 1892.
3	Wawelth	Coast district, on the eastern shore of Douglas channel, one mile south of reserve No. 2.	"	41½	
4	Tahla	Coast district, at the head of Kildala arm, Douglas channel.	"	12½	
1	Kitkahta	Coast district, on the northern shore of Kitkahta bay, Douglas channel.	Kitkahta	278	
2	Burial-ground	Coast district, on the left bank of the Quaal river, Kitkahta bay, at its mouth.	"	33	Allotted by Comm'r. O'Reilly, July 22, 1889. Surveyed, 1891. Final confirmation, May 4, 1892.
3	Quaal	Coast district, on the right bank of Quaal river, one mile from its mouth.	"	71½	
4	Kulkayu	Coast district, on the southern shore of Hartly bay, Douglas channel.	"	323	
1	Dolphin Island	Coast district, between Hecate strait and Ogden channel.	Kitlathla	3,848	
2	Grassy Islet	Coast district, one mile north of Dolphin island.	"	1·10	Allotted by Comm'r. O'Reilly, September 21, 1882. Surveyed, 1891–2. Final confirmation, June 30, 1893.
3	Kumowadah	Coast district, at the head of Lowe inlet, Grenville channel.	"	184	
4	Sand Island	Coast district, 1 mile north of reserve No. 1.	"	5	Allotted by Commissioner O'Reilly, July 10, 1891. Surveyed, 1891-2. Final confirmation, June 30, 1893.
5	Klapthlon	Coast district, 1 mile northwest of Calvert point, Grenville channel.	"	112	
5A	"	Coast district, an addition to reserve No. 5, on the west.	"	124	Allotted by Commissioner O'Reilly, September 6, 1893. Not surveyed or confirmed.
6	Pa-aat	Coast district, on the eastern shore of Pitt island, 2 miles south of False Stuart anchorage.	"	15	
7	Tsimtach	Coast district, on Pitt island, on the western shore of Union passage.	"	27	
8	Toowartz	Coast district, on the southern shore of Pitt island.	"	52	
9	Citeyats	Coast district, on the southern extremity of Pitt island, 2 miles north of Steep point.	"	36½	Allotted by Commissioner O'Reilly, July 10, 1891. Surveyed, 1891-2. Final confirmation, June 30, 1893.
10	Kitlawaoo	Coast district, on the eastern shore of Banks island, 2½ miles south of Gale point.	"	6	
11	Keecha	Coast district, on the eastern shore of Banks island, 1 mile north of Gale point.	"	4	
12	Kooryet	Coast district, on the eastern shore of Banks island, 4 miles north of Gale point.	"	13½	
13	Clowel	Coast district, on the western shore of Pitt island and southern shore of Minktrap cove.	"	15	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

NORTHWEST COAST AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
14	Sheganny	Coast district, on the west coast of Pitt island, at the head of Minktrap cove.	Kitlathla	27	Allotted by Commissioner O'Reilly, July 10, 1891. Surveyed, 1891-2. Final confirmation, June 30 1893.
15	Tsimlairen	Coast district, on the west coast of Pitt island, east of Anger island.	"	39½	
16	Keswar	Coast district, on the west coast of McCauley island, 3 miles south of Hankin point.	"	12½	
17	Keyahka	Coast district, on the northeastern shore of Banks island, 2 miles east of End hill.	"	21	
18	Kul	Coast district, on the southern shore of Bonilla island, Hecate strait.	"	95	
1	Wekellals	Coast district, on the banks of the Kitlup river, Gardners channel, about 4 miles from its mouth.	Kitlope	215	Allotted by Commissioner O'Reilly, July 25, 1889. Surveyed, 1891. Final confirmation, May 4, 1892
2	Kitlope	Coast district, on the north shore of Gardners channel, 1 mile from its head.	"	112	
3	Kemano	Coast district, on the north shore of Gardners channel, ½ mile south of Kemano river.	"	25½	
1	Kokyet	Coast district, on Yeo island, at the mouth of Ellerslie channel.	Kokyet	185	Allotted by Commissioner O'Reilly, August 29, 1882. Surveyed, 1888. Final confirmation, May 18, 1889.
2	Grief Island	Coast district, in Ellerslie channel, about 10 chains west of the village on reserve No. 1.	"	75	
3	Kyarti	Coast district, an island in Ellerslie channel, 1½ miles north of the village on reserve No. 1.	"	1·25	
4	Neekas	Coast district, at the head of Neekas cove, Ellerslie channel.	"	11	
5	Tankeah	Coast district, at the head of Berry harbour, Seaforth channel, Millbank sound.	"	32	
6	Koqui	Coast district, on Dufferin island, at the mouth of Gale creek, Seaforth channel.	"	95	
1	Massett	Coast district, at the mouth of Massett inlet, Queen Charlotte islands.	Massett	729	The Massett Indians have the privilege of fishing in the Yakoun river for a distance of 1 mile up-stream from the southeastern corner of reserve No. 4.
2	Hiellen	Coast district, on the right bank of Hiellen river, at its mouth.	"	70·50	
3	Yagan	Coast district, on Chatham sound, 12 miles east of Masset inlet.	"	86	
4	Lanas	Coast district, on the left bank of Yakoun river, 1½ miles from its mouth.	"	192·50	
5	Satunquin	Coast district, on the left bank of Yakoun river, at its mouth.	"	9	Allotted by Commissioner O'Reilly, July 13, 1882.

6	Ain	Coast district, at the mouth of Ain river, Massett inlet.	"	164	Surveyed, 1887. Final confirmation, July 27, 1888.
7	Yan	Coast district, at the western entrance to Massett inlet.	"	264	
8	Meagwan	Coast district, 6 miles west of the mouth of Massett inlet.	"	49	
9	Kose	Coast district, on the banks of Naden river, Virago sound, 2½ miles from its mouth.	"	9	
10	Naden	Coast district, at the mouth of Naden river, Virago sound.	"	27	
11	Kung	Coast district, at the head of Virago sound.	"	71	
12	Daningay	Coast district, on the western shore of Virago sound.	"	21	Allotted by Commissioner O'Reilly, July 13, 1882. Surveyed, 1887. Final confirmation, July 27, 1888.
13	Yatze	Coast district, 2 miles west of Virago sound.	"	45	
14	Jalun	Coast district, about 8 miles south of North island, on the right bank of Jalun river, at its mouth.	"	17·50	The Massett Indians have the privilege of fishing in the Jalun river for a distance of 1 mile above tidal water.
15	Kioosta	Coast district, on Parry passage, at the north-western extremity of Graham island.	"	101	
16	Tatense	Coast district, on North island, in Parry passage.	"	16	
1	Kitladamax	Cassiar district, on the banks of the Naas river, about 45 miles from its mouth.	Nass River	3,078	Allotted by Commissioner O'Reilly, October 20, 1881. Surveyed, 1886. Final confirmation, May 4, 1892.
1A	Kitladamax	Cassiar district, an extension of reserve No. 1 on its western boundary.	"	640	Allotted by Commissioner O'Reilly, Sept. 8, 1888. Surveyed, 1886. Final confirmation, May 4, 1892.
2	Tsimmanweenclist	Cassiar district, on the banks of the Nass river, half a mile above the Grease trail.	"	81·60	The Nass river Indians have the privilege of fishing in the Nass for a distance of two miles up stream from reserve No. 2.
3	Seaks	Cassiar district, an island at the confluence of the Seaks river with the Nass.	"	40·80	The Nass river Indians have the privilege of fishing in the Seaks river for a distance of one mile from its mouth.
4	Shumarl	Cassiar district, on the right bank of the Nass river, at the mouth of Shumarl creek.	"	178	Allotted by Commissioner O'Reilly, Oct. 20, 1881. Surveyed, 1886. Final confirmation, May 4, 1892.
5	Fishery	Cassiar district, on an island in the Nass river opposite the southwestern corner of reserve No. 4.	"	17·50	The Nass river Indians have the privilege of fishing in the slough, the southern boundary of this reserve, the length of the reserve.
6	Amatal	Cassiar district, on the left bank of Nass river to the west of reserve No. 5.	"	78·50	The Nass river Indians have the privilege of fishing in the Nass the entire length of this reserve.
7	Kitwillucshilt	Cassiar district, on the banks of the Nass river at the Lava beds.	"	493	The Nass river Indians have the privilege of fishing on the left bank of the Nass from the mouth of Andegulay slough half a mile up stream.
8	Andegulay	Cassiar district, on the left bank of the Nass, five miles above Lackalsap.	"	257	
8A	Andegulay	Cassiar district on the right bank of the Nass, immediately opposite reserve No. 8.	"	284	Allotted by Commissioner O'Reilly, Sept. 3, 1888. Surveyed, 1886. Final confirmation, May, 4, 1892.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

NORTHWEST COAST AGENCY, BRITISH COLUMBIA.

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
9	Lackalsap or Grenville	Cassiar district, on the banks of the Nass at the head of tidal water.	Nass River	3,955	The Nass river Indians have the privilege of fishing within the limits of this reserve.
10	Stony Point	Cassiar district, on the right bank of the Nass river at Stony point.	"	347·50	
11	Black Point	Cassiar district, on the right bank of the Nass river at Black point.	"	40·50	Allotted by Commissioner O'Reilly, Oct. 20, 1881. Surveyed, 1886. Final confirmation, May 4, 1892.
12	Lachtesk	Coast district, on the left bank of the Nass, twelve miles from its mouth.	"	299	
13	Red Cliff	Coast district, on the right bank of the Nass river, nine miles from its mouth.	"	773·50	The Nass river Indians have the privilege of fishing in the Nanook river for a distance of a quarter of a mile from its mouth.
14	Kincolith	Coast district, on the right bank of the Nass river, at its mouth.	"	1,180	
14A	Kincolith	Coast district, an extension of reserve No. 14, on the west.	"	410	Allotted by Commissioner O'Reilly, Sept. 8, 1888. Surveyed, 1890. Final confirmation, May 4, 1892.
15	Kinnamax	Coast district, on the right bank of Kinnamax river, nine miles north of Fort Simpson.	"	4	Allotted by Commissioner O'Reilly, Oct. 20, 1881. Surveyed, 1890. Final confirmation, May 4, 1892.
16	Talahaat	Coast district, on the banks of the Kinnamax river, two and a-half miles from its mouth.	"	160	The Nass river Indians have the privilege of fishing within the limits of reserve No. 16.
17	Georgie	Coast district, on the eastern shore of Portland canal, near Blue point.	"	71	
18	Kullan	Coast district, on the western shore of Portland canal, one mile from its head.	"	108	
19	Scamakounst	Coast district, on the eastern shore of Portland canal at its head, at the mouth of Bear river.	"	58·50	
20	Kinmelit	Coast district, in Salmon cove, on the western shore of Observatory inlet.	"	48·50	
21	Slooks	Coast district, on Dawkin's point, on the eastern shore of Observatory inlet.	"	17	Allotted by Commissioner O'Reilly, Sept. 8, 1888. Surveyed, 1890. Final confirmation, May 4, 1892.
22	Stagoo	Coast district, on the eastern shore of Observatory inlet, four miles north of reserve No. 21.	"	47·50	
23	Ktsinet	Coast district, on Perry bay, on the eastern shore of Observatory inlet.	"	271	
24	Gitzault	Coast district, on the western shore of Alice arm, Observatory inlet, at its head.	"	202·50	
25	Witzimagon	Coast district, on the western shore of Hastings arm, Observatory inlet, opposite Larcom island.	"	950	

26	Tackuan	Coast district, on the western shore of Hastings arm, Observatory inlet, two miles north of reserve No. 25.	"	500·50	
27	Kshwan.	Coast district, at the head of Hastings arm, Observatory inlet, on the right bank of Kshwan river.	"	133·50	Allotted by Commissioner O'Reilly, Sept. 8, 1888.
28	Scowban	Coast district, on the eastern shore of Observatory inlet, two and a-half miles north of North point.	"	78·50	Surveyed, 1890. Final confirmation, May 4, 1892.
29	Zaulzap	Cassiar district, on the banks of the Nass, about half a mile below reserve No. 7.	"	578	
30	Dachlabah	Cassiar district, on the right bank of the Nass, one mile west of reserve No. 8A.	"	151	Allotted by Commissioner O'Reilly, Sept. 29, 1896. Surveyed, 1896. Final confirmation, Dec. 10, 1896.
1	Katit.	Coast district, on the banks of Owekano river, Rivers inlet.	Owekano.	1,628	
2	Kiltala.	Coast district, on the right bank of the Kiltala river, Rivers inlet.	"	121	Allotted by Commissioner O'Reilly, August 7, 1882. Surveyed, 1889. Final confirmation, April 28, 1891.
3	Cockmi.	Coast district, on an island at the mouth of Rivers inlet.	"	11·75	
1	Skidegate.	Coast district, at the northern entrance to Skidegate inlet, Queen Charlotte islands.	Skidegate.	854	
2	Skaigha	Coast district, on Skidegate inlet, about seven miles north of reserve No. 1.	"	62	
3	Deena	Coast district, at the head of South bay, Skidegate inlet.	"	119	The Skidegate Indians have the privilege of fishing in the Deena river for a distance of one mile above tidal water
4	Khrana.	Coast district, at the eastern end of Maude island, Skidegate inlet.	"	210	
5	Lagins	Coast district, on the left bank of Lagins river, at the head of Long arm, Skidegate inlet.	"	40	Allotted by Comm'r. O'Reilly, July 28, 1882. Surveyed, 1887. Final confirmation, July 27, 1888.
6	Kaste	Coast district, in Copper bay, at the mouth of the Kaste river.	"	38	The Skidegate Indians have the privilege of fishing in the Kaste river for a distance of one mile above tidal water.
7	Cumshewas	Coast district, near the northern entrance to Cumshewas harbour, Queen Charlotte islands.	"	56	
8	Skedan	Coast district, at the southern entrance to Cumshewas harbour.	"	169	
9	Tanoo	Coast district, at the eastern end of Tanoo island, 45 miles south of Skidegate inlet.	"	65	
1	Fort Simpson	Coast district, in Port Simpson, on the Tsimpsean peninsula.	Tsimpsean, Pt. Simpson.	57	Allotted by Comm'r. O'Reilly, February 26, 1884. Surveyed, 1887. Final confirmation, January 26, 1892.
2	Tsimpsean reserve.	Coast district, on the Tsimpsean peninsula.	" {N. ½ " / S. ½ Metlakatla	57,742	
3	Wilnaskancaud..	Coast district, on the eastern shore of Kaien island, eight miles southeast of Metlakatla.	" Metlakatla..	6	
4	Shoowahtlans	Coast district, on the western shore of the Tsimpsean peninsula, east of Metlakatla.	" "	18	The Tsimpsean Indians have the privilege of fishing

SCHEDULE of Indian Reserves in the Dominion—*Continued*

NORTHWEST COAST AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
5	Cloyah	Coast district, on the western shore of the Tsimpsean peninsula, at the mouth of the Cloyah river.	Tsimpsean, Metlakatla	77	in the Cloyah river for a distance of 1½ miles from its mouth.
6	Willaclough	Coast district, on the right bank of the Skeena river, at Inverness.	" Pt. Simpson and Metlakatla in com.	33	Allotted by Comm'r. O'Reilly, October 29, 1881. Surveyed, 1887. Final confirmation, January 26, 1892.
7	Point Veitch	Coast district, on the left bank of the Skeena river, two miles west of Port Essington.	" "	16	
8	Khyex	Coast district, on the right bank of the Skeena river, at the mouth of the Khyex river.	" "	46	
9	Kilcutseen	Coast district, on the left bank of the Skeena river, about six miles east of Port Essington.	" "	18	
10	Khtahda	Coast district, on the left bank of the Skeena river, about 7 miles east of Port Essington, at the mouth of Khtahda river.	" "	7	Allotted by Comm'r. O'Reilly, Oct. 29, 1881. Surveyed, 1887.
11	Scuttsap	Coast district, on the left bank of the Skeena river, at the head of tidal water.	" "	9	Final confirmation, Jan. 26, 1892.
12	Tymgowzan	Coast district, on Compton island, at the mouth of Works canal.	" Pt. Simpson	73	
13	Ensheshese	Coast district, on the left bank of the Ensheshese river, Works canal.	" "	45	
14	Wilskaskammel	Coast district, on the east bank of the north fork of Works canal, 2 miles from the forks.	" "	8	
15	Toon	Coast district, on the right bank of Toon river, at the head of the north fork of Works canal.	" "	20	The Tsimpsean Indians have the privilege of fishing on the Toon river for a distance of 2 miles up stream from the head of tidal waters.
16	Lachmach	Coast district, on the right bank of Lachmach river, at the head of the south fork of Works canal.	" "	27	Allotted by Comm'r. O'Reilly, Sept. 13, 1882. Surveyed, 1887. Final confirmation, Jan. 26, 1892.
17	Spakels	Coast district, on the eastern shore of Somerville island, in Steamer passage, opposite Khutzeymateen inlet.	" "	19	
18	Birnie Island	Coast district, 2½ miles north of Fort Simpson.	" "	114	
19	Finlayson Island	Coast district, 1 mile west of Fort Simpson.	" "	1,589	Allotted by Comm'r. O'Reilly, Sept. 13, 1882.
20	Burnt Cliff Island	Coast district, in Pearl harbour, 4 miles south of Fort Simpson.	" "	67	Surveyed, 1887.
21	Tugwell Island	Coast district, 1½ miles west of Metlakatla	" Metlakatla	312	Final confirmation, Jan. 26, 1892.

22	Dashken	Coast district, on the northeast shore of Smith's island, on the north passage, Skeena river.	" Pt. Simpson and Metlakatla.	7·20	
23	Kashaoom	Coast district, on the northwest shore of De Horsey island, on the north passage, Skeena river.	" "	5·50	Allotted by Comm'r. O'Reilly, Sept. 11, 1888. Surveyed, 1891. Final confirmation, Jan. 26, 1892.
24	Meanlaw	Coast district, at Mowitch point, on the right bank of the Skeena river.	" "	7·50	
1	Killootsal	Coast district, at the mouth of Lakelse river a tributary of the Skeena.	Lakelse	156	Allotted by Comm'r. O'Reilly, Sept. 18, 1893. Not surveyed nor confirmed.

WEST COAST AGENCY, BRITISH COLUMBIA.

1	Acous	Rupert district, at the entrance to Ououkinsh inlet, on its western shore.	Checkleset	100	
2	Burial-ground	Rupert district, an island ½ mile southeast of reserve No. 1.	"	2	
3	Mahope	Rupert district, in Battle bay, Ououkinsh inlet.	"	40	
4	Hisnit	Rupert district, on the western shore of Ououkinsh inlet, 1½ miles from its head.	"	15	Allotted by Comm'r. O'Reilly, July 8, 1889. Surveyed, 1892.
5	Ououkinsh	Rupert district, on the eastern shore of Ououkinsh inlet, at its head.	"	10	Final confirmation, May 27, 1893.
6	Upsowis	Rupert district, between the entrances to Ououkinsh and Malksope inlets.	"	61	
7	Malksope	Rupert district, on the northern shore of Malksope inlet, at its head.	"	30	
1	Opitsat	Clayoquot district, on the southwestern shore of Meares island, Clayoquot sound.	Clayoquot	180	
2	Echachis	Clayoquot district, in island in Clayoquot sound, at the entrance to Broken and Templar channels.	"	44	
3	Esowista	Clayoquot district, in Long bay, about one mile east of Schooner cove.	"	17	
4	Kootowis	Clayoquot district, southeast of Indian island, Tofino inlet, Clayoquot sound.	"	37	
5	Okeamin	Clayoquot district, on the right bank of Kennedy river, Tofino inlet at its mouth.	"	24	
6	Clayoqua	Clayoquot district, at the head of the northwest arm of Kennedy lake.	"	110	
7	Winche	Clayoquot district, at the head of the northeast arm of Kennedy lake.	"	40	
8	Ilthpaya	Clayoquot district, on the right bank of Kennedy river at the head of the rapids.	"	$3\frac{50}{100}$	
9	Onadsilth	Clayoquot district, at the head of Deer creek, Tofino inlet.	"	45	
10	Edseuklis	Clayoquot district, at the head of Tranquil creek, Tofino inlet.	"	40	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

WEST COAST AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
11	Yarksis.	Clayoquot district, on the eastern shore of Vargas island, Clayoquot sound.	Clayoquot Kelsemart b'd	103	
12	Cloolthpich.	Clayoquot district, on the western shore of Meares island, Clayoquot sound.	" " . .	59	
13	Quortsawe.	Clayoquot district, at the head of Warm bay, Clayoquot sound.	" " . .	36	
14	Oinimitis.	Clayoquot district, on the eastern shore of Bedwell sound at its head.	" " . .	25	
15	Marktosis	Clayoquot district, at the head of Matilda creek, Flores island, Clayoquot sound.	" Ahousaht band	260	Allotted by Commissioner O'Reilly, June 24, 1889. Surveyed, 1893.
16	Ahous	Clayoquot district, at the southern end of Open bay, Vargas island, Clayoquot sound.	" " . .	34	Final confirmation, May 16, 1894.
17	Chetahpe.	Clayoquot district, on the shore of Clayoquot sound, west of Catface mountain.	" " . .	35	
18	Sutaquis.	Clayoquot district, half a mile west of Crane island.	" " . .	27	
19	Wahous (fishery)	Clayoquot district, at the mouth of Trout river, Cypress bay, Clayoquot sound.	" " . .	143	
20	Wahous (village).	Clayoquot district, on the northern shore of Cypress bay, Clayoquot sound.	" " . .	34	
21	Tequa.	Clayoquot district, at the head of Bawden bay, Herbert arm, Clayoquot sound.	" " . .	6	
22	Peneetle	Clayoquot district, at the head of White Pine cove, Herbert arm, Clayoquot sound.	" " . .	95	
23	Moyehai.	Clayoquot district, on the western shore of Herbert arm, Clayoquot sound.	" " . .	13	
24	Seektukis.	Clayoquot district, on the eastern shore of North arm, Clayoquot sound.	" " . .	34	
25	Watta.	Clayoquot district, at the head of Shelter arm, Clayoquot sound.	" " . .	12	
26	Wappook.	Clayoquot district, on the northern shore of Shelter arm, Clayoquot sound, and north of Obstruction island.	" " . .	11	
27	Openit.	Clayoquot district, on the western shore of Sydney inlet, Clayoquot sound, about one mile north of Refuge cove.	" Manhauset band	77	
28	Tootoowiito-na.	Clayoquot district, on the eastern shore of Sydney inlet.	" " . .	21	
29	Kishnacous.	Clayoquot district, at the head of Sydney inlet.	" " . .	34	

1	Nuchatl	Nootka district, an island at the entrance to Esperanza inlet.	Esperanza Inlet, Nuchatl-itz.	16	
2	Nuchatl	Nootka district, on western shore of Nootka island, south of reserve No. 1.	" "	57	
3	Ahpukto	Nootka district, on western shore of Port Langford, near its head.	" "	7	
4	Opemit	Nootka district, on western shore of Nootka island, ½ mile north of reserve No. 1.	" "	16	
5	Shoomart	Nootka district, at the head of Inner basin, Nootka sound.	" "	21	
5	Owossit-sa	Nootka district, one mile southeast of Centre island, Esperanza inlet.	" "	8½	
7	Oclucje	Nootka district, at the head of Espinoza arm, Esperanza inlet.	" "	33	
8	Occosh	Nootka district, on the western shore of Port Eliza, Esperanza inlet, at its head.	" "	31	Allotted by Comm'r. O'Reilly, July 2, 1889. Surveyed, 1893. Final confirmation, May 16, 1894.
9	Chiseuquis	Nootka district, on the eastern shore of Catala island.	" "	19	
10	Oke	Nootka district, on the northern shore of Esperanza inlet, three miles northeast of Centre island.	Esperanza Inlet, Ehatisaht band.	32	
10A	Grave-yard	Nootka district, on the northern shore of Esperanza inlet, ½ mile west of reserve No. 10.	" "	2	
11	Ehatis	Nootka district, on the western shore of Zeballos arm, at its head.	" "	40	
12	Chenahkint	Nootka district, on the eastern shore of Queen's cove, Port Eliza, at its entrance.	" "	55	
13	Tatchu	Nootka district, at Tatchu point, 5½ miles west of the entrance to Esperanza inlet.	" "	13	
1	Hesquiat	Clayoquot district, at the entrance to Hesquiat harbour, on its western shore.	Hesquiat	222	
2	Homais	Clayoquot district, at the entrance to Nootka sound, on the eastern shore.	"	89	
3	Teahmit	Clayoquot district, on the western shore of Hesquiat harbour.	"	107	Allotted by Comm'r. O'Reilly, June 26, 1886. Surveyed, 1893. Final confirmation, May 16, 1894.
4	Maahpe	Clayoquot district, on the northwestern shore of Hesquiat harbour.	"	159	
5	Iusuk	Clayoquot district, on the eastern shore of Hesquiat harbour.	"	29	
1	Village Island	Rupert district, near the western entrance to Kyuquot sound.	Kyuquot	118	
2	Mission Island	Rupert district, the eastern portion of Mission island, ½ mile east of reserve No. 1.	"	73	
3	Ahmacinnit	Rupert district, two islands situated ¼ mile northeast of reserve No. 1.	"	11	
4	Granite Island	Rupert district, ¾ mile northwest of reserve No. 1.	"	215	
5	Yakats	Rupert district, on the eastern shore of Clanni-nick harbour, Kyuquot sound.	"	4½	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

WEST COAST AGENCY, BRITISH COLUMBIA.—*Concluded.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
6	Houpsitas	Rupert district, north of Walter's island. Kyuquot sound.	Kyuquot	29	
7	Chamiss	Rupert district, on the northern shore of Chamiss bay, Kokshittle arm.	"	13	
8	Kayouk	Rupert district, on the western shore of Easy creek, Kokshittle arm.	"	7	
9	Kashittle	Rupert district, on the western shore of Kokshittle arm, at its head.	"	12½	Allotted by Comm'r. O'Reilly, July 6, 1889, Surveyed, 1892. Final confirmation, May 16, 1894.
10	Kaoowinch	Rupert district, on the eastern shore of Kokshittle arm, opposite Easy creek.	"	20	
11	Tahsish	Rupert district, at the head of Tahsish arm, Kyuquot sound.	"	21	
12	Artlish	Rupert district, on the eastern shore of Tahsish arm, 2 miles from its head.	"	18	
13	Kaouk	Rupert district, at the head of Fair harbour, Tahsish arm.	"	13	
14	Markale	Rupert district, situated on an isthmus between the western head of Fair harbour and Pinnace channel, Kyuquot sound.	"	13	
15	Amai	Rupert district, at the head of Deep inlet, Kyuquot sound.	"	30½	
16	Machta	Rupert district, on Shingle point at the entrance to Narrow Gut creek.	"	9	
1	Ahuk	Barclay district, on the eastern shore of Ahuk lake, about 3½ miles northwest of the outlet of Nitinat lagoon.	Nitinat	132	
2	Tsuquanah	Barclay district, on the seacoast about 1 mile west of the outlet of Nitinat lagoon.	"	235	
3	Wyah	Renfrew district, on the eastern shore of the outlet of Nitinat lagoon.	"	132	
4	Cla-oose	Renfrew district, at the mouth of the Suwany river, on its right bank.	"	248½	
4A	Burial-ground	Renfrew district, on the left bank of the Suwany river, at its mouth.	"	9·30	
5	Sarque	Renfrew district, on the right bank of the Suwany river, 2 miles from its mouth.	"	25·80	
6	Carmanah	Renfrew district, adjoining the Carmanah point lighthouse reserve on the east.	"	158½	

7	Iktuksasuk	Barclay district, on the northern shore of Nitinat lagoon, 1 mile from its outlet.	"	168	
8	Homitan	Barclay district, on the northern shore of Nitinat lagoon, 4½ miles from its head.	"	50	
9	Oyees	Renfrew district, on the southern shore of Nitinat lagoon, 7½ miles from its head.	"	104½	Allotted by Comm'r. O'Reilly, August 7, 1890. Surveyed, 1892. Final confirmation, May 16, 1894.
10	Doobah	Renfrew district, on the southern shore of Nitinat lagoon, 6 miles from its head.	"	13	
11	Malachan	Renfrew district, on the southern shore of Nitinat lagoon, 1 mile from its head.	"	66	
12	Ildo	Renfrew district, near the mouth of Nitinat river, partly in section 6, township 1.	"	77	
13	Opatseeah	Renfrew district, at the mouth of Nitinat river, part of western half of section 5, township 1,	"	71	
14	Wokitsas	Renfrew district, on the right bank of Nitinat river, a portion of northwest ¼, section 9, township 1.	"	40	
15	Chuchummisapo	Renfrew district, on the left bank of Nitinat river, a portion of northeast ¼, section 22, township 1.	"	92	
16	Saouk	Renfrew district, on the right bank of Nitinat river, being portions of sections 25 and 36, township 1, and section 6, township 2.	"	175	
1	Yuquot	Nootka district, Friendly cove, Nootka sound.	Nootka	210	
2	Tsarksis	Nootka district, on southern shore of Nootka island, about 3 miles east of Bajo point.	"	81	
3	Aass	Nootka district, on southern shore of Nootka island, at Bajo point.	"	14	
4	Nesuk	Nootka district, on eastern shore of Tlupana arm, one mile east of Separation saddle.	"	5	
5	Moutcha	Nootka district, on eastern shore of Tlupana arm, north of Separation saddle.	"	15	
6	Sucwoa	Nootka district, at northern extremity of Head bay, Tlupana arm.	"	36	
7	Hisnit	Nootka district, at the head of Deserted creek, Tlupana arm.	"	11	
8	Hoiss	Nootka district, 1 mile northeast of Canal island, Nootka sound.	"	44	
9	Coopte	Nootka district, to the east of Narrow island, on the eastern shore of Tahsis canal, Nootka sound.	"	35	Allotted by Commissioner O'Reilly, June 28, 1889 Surveyed, 1893. Final confirmation, May 16, 1894.
10	Tsowwin	Nootka district, on the eastern shore of Tahsis canal, about 8 miles from its head.	"	34	
11	Tahsis	Nootka district, on the eastern shore of Tahsis canal, at its head.	"	42	
12	Ahaminaguus	Nootka district, at the mouth of Gold river on its right bank, north shore Muchalat arm.	" Matchitlacht band.	39	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

WEST COAST AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
13	Matchlee	Nootka district, at the head of Muchalat arm, on its northern shore.	Nootka, Matchitlacht band.	12½	
14	Hlee te	Nootka district, on the northern shore of Williamson passage, Muchalat arm.	" "	10	
15	Cheeshish	Nootka district, on Nootka sound, northeast of Bligh island.	" "	29	
16	Mooyah	Clayoquot district, at the head of Camp bay, Muchalat arm.	" "	13	
17	Ous	Clayoquot district, on the southern shore of King's pass, Muchalat arm.	" "	24	
1	Numukamis	Barclay district, on Numukamis bay, Barclay sound.	Oiaht	1,700	
2	Nuchaquis	Barclay district, on eastern shore of Copper island, Barclay sound.	"	32	
3	Dochsupple	Barclay district, at the head of Poetts nook, Barclay sound.	"	21	
4	Sachsa	Barclay district, at the head of Grappler creek, Barclay sound, portion of section 28, township 1.	"	13	
5	Sachawil	Barclay district, on the northwest shore of Helby island.	"	7	
6	Kirby Point	Barclay district, on the northwest shore of Diana island.	"	35	Allotted by Commissioner O'Reilly, June 1, 1882. Surveyed 1883.
7	Hamilton Point	Barclay district, the southern portion of Diana island.	"	86	Final confirmation, March 24, 1885.
8	Haines Island	Barclay district, Barclay sound.	"	30	
9	Keeshan	Barclay district, at the southern entrance to Barclay sound, 1½ miles northeast of Cape Beale.	"	330	
10	Kichha	Barclay district, 1½ miles east of Cape Beale.	"	12	
11	Clutus	Barclay district, at western entrance to Pacheena bay.	"	105	
12	Anacla	Barclay district, at the head of Pacheena bay, the eastern half of section 8, township 1.	"	218	
13	Masit	Barclay district, at eastern entrance to Pacheena bay, east of Seabird island.	"	83	
1	Ahahswinis	Alberni district, on the left bank of the Somass river, 1½ miles from its mouth.	Opitchesaht	96	

2	Klehkoot	Alberni district, on the left bank of the Somass river, 5½ miles from its mouth.	"	290	Allotted by Comm'r. O'Reilly, June 5, 1882. Surveyed, 1883.
3	Cous	Alberni district, on the west bank of the Alberni canal, at the second narrows.	"	132	Final confirmation, March 24, 1885.
4	Chuchukacook	Clayoquot district, on the west shore of Alberni canal, one mile north of Nahmint bay.	"	5	
1	Pacheena	Renfrew district, on San Juan harbour, and the south branch of the San Juan river.	Pacheena	153	Allotted by Comm'r. O'Reilly, June 7, 1882. Surveyed, 1890.
2	Pacheena	Renfrew district on San Juan harbour, and the north branch of the San Juan river.	"	156	Final confirmation, May 27, 1893.
3	Cullite	Renfrew district, 5 miles west of Port San Juan.	"	95	Allotted by Commissioner O'Reilly, June 17, 1889. Surveyed, 1892. Final confirmation, May 27, 1893.
4	Fishing station	Renfrew district, at the confluence of Harris creek and San Juan river, a portion of the N.W. ¼, section 12, township 10.	"		Allotted by Commissioner O'Reilly, October 30, 1894. Not surveyed. Approximate, 28 acres.
1	Tsahaheh	Alberni district, on the right bank of the Somass river, about 3 miles from its mouth.	Seshart	1,030	Allotted by Commissioner O'Reilly, June 3, 1882. Surveyed, 1883. Final confirmation, March 24, 1885.
2	Alberni	Alberni district, on the eastern shore of Alberni canal, near its head.	"	156	
3	Iwachis	Barclay district, on the eastern shore of Alberni canal, at the first narrows.	"	26	
4	Tseoowa	Clayoquot district, on the eastern shore of Rainy bay, Barclay sound.	"	8	
5	Ahmitsa	Barclay district, on the southern shore of Seddall island, in Rainy bay.	"	26	Allotted by Commissioner O'Reilly, June 3, 1882. Surveyed, 1883. Final confirmation, March 24, 1885.
6	Cletro	Barclay district, on the eastern shore of Nettle island, Barclay sound.	"	13	Allotted by Commissioner O'Reilly, June 3, 1882. Surveyed, 1893. Final confirmation, May 16, 1894.
7	Keith Island	Barclay district, in Barclay sound	"	17	
8	Equis	Clayoquot district, 1½ miles east of Lyall point, Barclay sound.	"	123	
9	Omoah	Barclay district, on the eastern shore of Village island, Barclay sound.	"	30	
1	Macoah	Clayoquot district, on Village passage, Barclay sound.	Toquart	124	Allotted by Commissioner O'Reilly, June 3, 1882. Surveyed, 1893. Final confirmation, May 16, 1894.
2	Deekyakus	Clayoquot district, at the head of Toquat harbour, Barclay sound.	"	214	
3	Chequis	Clayoquot district, 1½ miles south of reserve No. 1 and west of David island, Barclay sound.	"	3	
4	Chenatha	Clayoquot district, at the mouth of Chenatha river, Barclay sound.	"	62	
5	Dookqua	Clayoquot district, Alpha passage, Barclay sound.	"	18	Allotted by Commissioner O'Reilly, June 3, 1882 Surveyed, 1893. Final confirmation, May 16, 1894
1	Cowishil	Clayoquot district, at the entrance to Uchucklesit harbour, Barclay sound.	Uchucklesit	175	Allotted by Commissioner O'Reilly, June 5, 1882 Surveyed, 1883. Final confirmation, March 24 1885.
2	Elhlateese	Clayoquot district, at the head of Uchucklesit harbour, Barclay sound.	"	400	

SCHEDULE of Indian Reserves in the Dominion—*Continued*

WEST COAST AGENCY, BRITISH COLUMBIA—*Concluded.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Ittatsoo	Clayoquot district, on the eastern shore of Ucluelet arm, Barclay sound.	Ucluelet	162	Allotted by Commissioner O'Reilly, June 5, 1882. Surveyed, 1883. Final confirmation, March 24, 1885.
2	Clakamucus	Clayoquot district, at the head of Ucluelet arm, Barclay sound.	"	14	
3	Outs	Clayoquot district, at the mouth of Effingham inlet, Barclay sound.	"	12	
4	Quinaquilth	Clayoquot district, near the head of Effingham inlet, Barclay sound.	"	15	
5	Kleykleyhouse	Clayoquot district, at the head of Nahmint bay, Alberni canal.	"	150	
6	Ucluth	Clayoquot district, 1½ miles southeast of Wreck bay.	"	62·50	Allotted by Commissioner O'Reilly, June 18, 1889. Surveyed, 1893. Final confirmation, May 16, 1894.
7	Wya	Clayoquot district, ½ mile southeast of Wreck bay.	"	22·50	
8	Oo-oolth	Clayoquot district, at the northern extremity of Wreck bay.	"	42	
9	Quisitis	Clayoquot district, 1 mile northwest of Wreck bay.	"	12·50	

WILLIAMS LAKE AGENCY, BRITISH COLUMBIA.

1	Alexandria	Cariboo district, on the left bank of Fraser river, at the 197 mile post on the Cariboo wagon road.	Alexandria	554·50	100 inches of water recorded from Four-mile creek.
2	Hay ranch	Cariboo district, 3½ miles east of Alexandria.	"	60	
3		Cariboo district, on the right bank of Fraser river, adjoining lot 46, group 1, and opposite reserve No. 1.	"	1,234	12 inches of water recorded from a spring upon the reserve. The Alexandria Indians have the privilege of fishing on the right bank of Fraser river upon reserve No. 1. A grave-yard situated on lot 46, group 1, is also reserved. Allotted by Commissioner O'Reilly, July 4, 1881. Surveyed, 1883. Final confirmation, June 4, 1884.
1	Alkali Lake	Lillooet district, east of and adjoining lot 6, group 3.	Alkali Lake	596·50	
2		Lillooet district, 3 miles northeast of reserve No. 1.	"	800	
3		Lillooet district, 1⅜ miles east of reserve No. 2.	"	180	

4	.....	Lillooet district, mile south of reserve No. 3.	"	540	
5	Alixton.	Lillooet district, 1½ miles southwest of reserve No. 4.	"	227	
6	Wycott's Flat.....	Lillooet district, on the left bank of Fraser river, about 19 miles southwest of Alkali lake.	"	1,230	The right to the water retained by a dam at Harper's lake is recorded for this reserve.
7	....	Lillooet district, on the north shore of Lake la Hache, in section 10, township 39.	"	14	A grave-yard situated on lot 319, group 1. The privilege of fishing on the left bank of Fraser river from the mouth of Chilcoten river to Little Dog creek. Allotted by Commissioner O'Reilly, July 15, 1881. Surveyed, 1883. Final confirmation, June 4, 1884.
8	Little Springs	Lillooet district, one-quarter of a mile north-east of reserve No. 7.	"	480	
9	Cludolicum.....	Lillooet district, three-quarters of a mile northeast of reserve No. 8.	"	1,400	
10	Loon Lake..	Lillooet district, one mile and three-eighths east of reserve No. 9.	"	300	
11	Sampson's Meadow	Lillooet district, one-quarter of a mile west of lot 323, and half a mile southeast of reserve No. 12.	"	800	
12	....	Lillooet district, three-quarters of a mile south-east of reserve No. 4.	"	300	
13	....	Lillooet district, two miles and one-eighth east of reserve No. 14.	"	1,400	
14	Roper's Meadow	Lillooet district, one mile south of reserve No. 5.	"	80	Allotted by Commissioner O'Rielly, Aug. 30, 1895. Surveyed, 1897. Final confirmation, March 5, 1898.
1	Anaham's Flat.....	Cariboo district, on the left bank of the Chilcoten river, about forty-five miles from its mouth and about seven miles northwest of Hanceville.	Anaham	9,285	200 inches of water recorded from Big Flat or Anaham creek. 100 inches of water recorded from a creek near the eastern end of the reserve, about one mile from Anaham creek.
2	Anaham's Meadow.....	Cariboo district, about five miles north of the Indian village on reserve No. 1.	"	637	Allotted by Commissioner O'Reilly, July 8, 1887. Surveyed, 1894. Final confirmation, April 23, 1895.
1	Nequatque	Lillooet district, at the head of Anderson lake.	Anderson Lake	444	100 inches of water from Anderson or Mosquito creek recorded.
2	....	Lillooet district, one and three-quarter miles south of Anderson lake.	"	20	
3	.....	Lillooet district, one-quarter of a mile west of reserve No. 2.	"	20	25 inches of water recorded from a creek running through the reserve known as Quoquihatqua creek.
4	....	Lillooet district, five miles southwest of Anderson lake and on the banks of the Mosquito or Anderson river.	"	20	The privilege of fishing on Mosquito river through the whole length of reserve No. 1. A grave-yard situated on Mr. Chapman's land, lot 100, group 1. Allotted by Commissioner O'Reilly, Sept. 5, 1881. Surveyed, 1882. Final confirmation, June 4, 1884.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

WILLIAMS LAKE AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Bridge River	Lillooet district, on both banks of Bridge river from its confluence with Fraser river up stream.	Bridge River	9,621	25 inches of water recorded from creek one mile north of village ; 50 inches of water recorded from a creek on south bank ; 50 inches of water recorded from Camoo's creek ; 10 inches of water recorded from a spring on the reserve ; 50 inches of water recorded from a creek on the reserve on the north bank of Bridge river.
2		Lillooet district, on the right bank of Fraser river, two and one-quarter miles northeast of reserve No. 1.	"	140	50 inches of water recorded from Big creek. The privilege of fishing on both banks of Fraser river from half a mile below Bridge river up stream to Fountain fishery. Allotted by Commisioner O'Reilly, Sept. 1, 1881. Surveyed, 1884. Final confirmation, May 1, 1886.
1	Canim Lake	Lillooet district, on Bridge creek, one mile west of Canim lake.	Canim Lake	4,400	100 inches of water recorded from a creek on the north side of reserve.
2		Lillooet district, on Bridge creek about half way between reserve No. 1 and the 100 mile post on the Cariboo wagon road.	"	160	Allotted by Commissioner O'Reilly, July 10, 1887. Surveyed, 1894. Final confirmation, April 23, 1895.
1		Lillooet district, on Canoe creek in the northwest quarter section of section 16, township 10.	Canoe Creek	93	
2		Lillooet district, on Canoe creek, one mile and one-half from reserve No. 1, and adjoining sections 3-10, township 10.	"	4,460	100 inches of water recorded from Canoe creek.
3		Lillooet district, on the left bank of Fraser river ; north of and adjoining townships 4-10.	"	6,931	20 inches of water recorded from a small stream running through the reserve.
4	Spilmouse	Lillooet district, on Canoe creek about two miles above reserve No. 2.	"	400	
5	Fish Lake	Lillooet district, at the foot of Fish lake, one and one-half miles northeast of reserve No. 4.	"	105	
6	Toby Lake	Lillooet district, on the road from Canoe creek to the 57 mile post on the Cariboo road and six miles southeast of lot 141, group 1.	"	4,140	
....	Grave-yard	A grave-yard on the left bank of Canoe creek, one-half mile from its mouth, in section 1, township 4. A grave-yard situated in section 17, township 10. A grave-yard	"	.....	The Canoe Creek Indians have the privilege of fishing on both banks of Fraser river, from one and one-half miles above Canoe creek down stream five and one-half miles.

		on the right bank of canoe creek, situated in section 8, township 10. A grave-yard seven chains north of Canoe creek, situated in section 15, township 10.			The privilege of fishing in Green lake, situated four miles east of the 73 mile post on the Cariboo wagon road. Reserves 1, 2, 3 with grave-yards and fishing privileges allotted by Comm'r. O'Reilly July 21, 1884. Reserves 1, 2, 3 surveyed 1883. Final confirmation, June 4, 1884. Reserves 4, 5, 6 allotted by Comm'r. O'Rielly, Sept. 5, 1895. Uusurveyed.
1	Cayoosh Creek.....	Lillooet district, south of Cayoosh creek and west of, and adjoining lot 3, group 1, Lillooet district.	Cayoosh Creek.....	367	100 inches of water recorded from Cayoosh creek, 12 inches of water recorded from a spring on the reserve.
2	Pashilqua	Lillooet district, on the right bank of Fraser river, south of lot 3, group 1, and northeast of lot 7, group 1, and opposite Lillooet reserve No. 4.	"	785	25 inches of water from a spring running through the reserve. A grave-yard situated on lot 3, group 1. The privilege of fishing on the right bank of Fraser river from the mouth of Cayoosh creek down stream two and one half miles. The privilege of fishing in Cayoosh creek from its mouth up stream for one mile. Allotted by Comm'r. O'Reilly, August 29, 1881. Surveyed 1884. Final confirmation, May 1st, 1886.
1	Clinton.	Lillooet district, west of the town of Clinton and north of and adjoining lot 3, group 5.	Clinton	225	25 inches of water recorded from a stream flowing through the reserve.
2	.....	Lillooet district, at the 39 mile post on the road from Lillooet to Clinton, and east of and adjoining lot 9, group 1.	"	848	100 inches of water recorded from Kelly creek. A grave-yard situated to the east of the reserve. The privilege of fishing on both banks of Fraser river from Leon creek to the High Bar Indians fishery. Also the privilege of fishing in Green lake, situated four miles east of the 73 mile post on the Cariboo wagon road. Allotted by Comm'r O'Reilly, July 30, 1881. Surveyed, 1883. Final confirmation, June 4, 1884.
1	Dog Creek.....	Lillooet district, on Dog creek, about three miles from its confluence with Fraser river.	Dog Creek.....	357·50	50 inches of water recorded from Dog creek.
2	.....	Lillooet district, on Dog creek, three miles and three quarters east of reserve No. 1.	"	540	
3	.....	Lillooet district,on Dog creek, three quarters of a mile north, northeast of reserve No. 2.	"	20	
3	.....	Lillooet district, on the left bank of Fraser river above Dog creek and south of and adjoining Alkali lake reserve No. 6.	"	454	A grave-yard situated on lot 5, group 6, west of reserve No. 1, and containing $\frac{6}{100}$ acres. The privilege of fishing on both banks of the Fraser river from the mouth of Dog creek up stream to the mouth of Harpers lake creek, a distance of one and one-half miles. Allotted by Comm'r. O'Reilly, July 19, 1881.

SCHEDULE of Indian Reserves in the Dominion—*Continued*

WILLIAMS LAKE AGENCY, BRITISH COLUMBIA—*Continued.*

No.	Name	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
1	Fountain	Lillooet district, on Fountain creek, about one-eighth mile south of the left bank of Fraser river, west of and adjoining lot 1, group 2.	Fountain	338	Surveyed, 1883. Final confirmation, June 4, 1884. The unappropriated water in Fountain creek was recorded Feb. 23, 1891. The right to 300 inches of water was purchased from Chinamen and recorded May 8, 1895.
2		Lillooet district, on the left bank of Fraser river, south and west of Bridge river reserve No. 1.	"	166	
3		Lillooet district, on the left bank of Fraser river, south of Fourteen Mile creek on the road from Clinton to Fountain.	"	427	The privilege of fishing on both banks of Fraser river from Eleven Mile creek down stream to Bridge river fishery, about 4½ miles.
4		Lillooet district, on Fountain creek, 2¾ miles southeast of reserve No. 1.	"	160	
5		Lillooet district, on Fountain creek, about one quarter mile south of reserve No. 4.	"	240	Reserves Nos. 1, 2, 4, 5, 6, allotted by Commssioner. O'Reilly, August 26, 1881. Surveyed, 1884. Final confirmation, May 1, 1886.
6		Lillooet district, about 1½ miles south of reserve No. 5, and about half a mile north of Lytton reserve No. 7.	"	533	Reserve No. 3, allotted May 1, 1886. Surveyed 1884. Final confirmation, May 1, 1886.
1	High Bar	Lillooet district, on both banks of Fraser river, northwest of and adjoining lot 36, group 1.	High Bar	2,924	The right to 25 inches of water from a stream flowing through the reserve is recorded. The privilege of fishing on both banks of Fraser river from the confluence of Barney creek up stream to the northern boundary of the reserve. A grave-yard situated on lot 27, group 1, near its southern boundary. Allotted by Commissioner O'Reilly, July 25. 1881. Surveyed in 1883. Final confirmation, June 4, 1884.
1		Lillooet district, west of and adjoining the town of Lillooet on the right bank of Fraser river at the confluence of Cayoosh creek.	Lillooet	919½	25 inches of water recorded from a spring one half mile east of reserve; 25 inches of water recorded from a spring near Cayoosh creek; 12 inches of water recorded from a spring near the Indian village.
2	Towinock	Lillooet district, on the right bank of Fraser river, eight miles below reserve No. 1.	"	220	50 inches of water recorded from a stream on the reserve.
3	Kilchult	Lillooet district, on the right bank of Fraser river, one mile north of reserve No. 3.	"	104	

4	McCartney's Flat	Lillooet district, on the left bank of Fraser river, 1½ miles southeast of the town of Lillooet and opposite Cayoosh reserve No. 2	"	423½	A grave situated one-half mile north of reserve No. 4, and one-eighth mile east of Fraser river.
5		Lillooet district, at the foot of Seton lake, at the effluence of Seton creek.	"	75½	A grave-yard situated on lot 10, block 2, Lillooet suburban lots. The privilege of fishing on both banks of Fraser river from the confluence of Cayoosh creek up stream to one-half mile below Bridge river about four miles; also the privilege of fishing on the left bank of Fraser river from the mouth of Cayoosh creek down stream three miles. Also the privilege of fishing on both banks of Seton creek down stream one-quarter mile from Seton lake. Allotted by Commissioner O'Reilly, August 31, 1881. Surveyed, 1884. Final confirmation, May 1, 1886.
1	Chilco Lake	Coast district, on Chilco lake, at the outlet of Nemaih valley.	Nemaih Valley.	200	Allotted by Commissioner Vowell, September 20, 1899. Unsurveyed. Acreage only approximate.
2	Garden reserve.	Coast district, in Nemaih valley, about four and one-half miles from reserve No. 1.	"	80	
3	Fishery reserve.	Coast district, in Nemaih valley, at the foot of Connee lake.	"	545	
4	Meadow reserve.	Coast district, in Nemaih valley, at the head of Connee lake.	"	432	
1	Pavilion	Lillooet district, on the left bank of Fraser river, north of Pavilion creek.	Pavilion	2,318½	100 inches of water recorded from Pavilion creek.
2	Leon Creek	Lillooet district, on both banks of Leon creek, on the left bank of Fraser river, northwest of reserve No. 1.	"	1,167½	100 inches of water recorded from Leon creek; 25 inches of water from a creek at south end of reserve.
3	Marble Canyon	Lillooet district, on the road from Pavilion to Hat creek.	"	650	A grave on lot 18, group 1, Lillooet district. Three separate graves on the trail from Pavilion to Hat creek. The privilege of fishing on both banks of Fraser river from Leon creek down stream 5½ miles. Allotted by Commissioner O'Reilly, August 4, 1881. Surveyed, 1884. Final confirmation, May 1, 1886.
1		Cariboo district, on the left bank of Fraser river, one mile south of the town of Quesnel.	Quesnel	1,367	
2	Fishery.	Cariboo district, on the right bank of Fraser river, opposite the western end of reserve No. 1.	"	46½	
3	Fishery.	Cariboo district, at the foot of a small lake, about two miles east of the town of Quesnel.	"	39	

SCHEDULE of Indian Reserves in the Dominion—*Continued*
WILLIAMS LAKE AGENCY, BRITISH COLUMBIA.

No.	Name.	Where Situated.	Tribe or Band.	Area, Acres.	Remarks.
4	Rich Bar	Cariboo district, on the left bank of Fraser river, south of and nearly adjoining reserve No. 1.	Quesnel	235	20 inches of water recorded from a creek at the north end of the reserve; a grave on the left bank of Quesnel river, on lot 48; a grave on the left bank of Fraser river, 1 mile from the town of Quesnel, containing ·17 of an acre; a grave in Quesnel town between Front street and tha Fraser river; a grave on lot 4, block 8, Quesnel town. Allotted by Commissioner O'Reilly, July 2, 1881. Surveyed, 1883. Final confirmation, June 4, 1884.
1	Slosh	Lillooet district, at the head and on the north shore of Seton lake.	Seton Lake	2,085	50 inches of water running through the reserve recorded; 20 inches of water recorded from a creek on reserve; 20 inches of water recorded from creek, 2 miles east of reserve; 100 inches of water recorded from Portage river; 50 inches of water recorded 1 mile west of mission.
2	Silicon	Lillooet district, on the north shore of Seton lake, about six miles from the outlet and opposite reserve No. 4.	"	139	
3		Lillooet district, on the south shore of Seton lake, southeast of reserve No. 1.	"	22	12 inches of water recorded from a spring.
4		Lillooet district, on the south shore of Seton lake, opposite reserve No. 4.	"	27	
5		Lillooet district, south of and adjoining reserve No. 1.	"	80	
6	Neciat	Lillooet district, at the foot of Anderson lake, on both sides of Portage river.	"	84	50 inches of water recorded from a creek running through the reserve. The privilege of fishing on Portage river from Anderson to Seton lake. Allotted by Commissioner O'Reilly, September 3, 1881. Surveyed, 1882. Final confirmation, June 4, 1884.
1	Soda Creek	Cariboo district, on the left bank of Fraser river, southeast of the village of Soda creek.	Soda Creek	1,090	A record of 100 inches made July 21, 1890, to be taken from Soda creek.
2	Deep Creek	Cariboo district, east of the 168-mile post on the Cariboo wagon road.	"	4,120	100 inches of water recorded from 170-mile creek. Allotted by Commissioner O'Reilly, June 20, 1881. Surveyed, 1894. Final confirmation, April 23, 1895.
1		Cariboo district, on the south bank of Chilcoten river, about 3½ miles west of Hanceville.	Stone	3,925	100 inches of water recorded from Mintou creek.
2	Meadow reserve	Cariboo district, about eight miles southeast of reserve No. 1.	"	320	A grave-yard on the trail from Hanceville to Anaham Flat. The privilege of fishing in the Chilcoten river

					from a point one and a half miles below Hanceville down stream for one mile. Allotted by Commissioner O'Reilly, July 11, 1887. Surveyed, 1894. Final confirmation, April 23, 1895.
1	Toosey	Cariboo district, on Riské creek, one mile west of lot 66, group 1, in the sub-district of Chilcoten.	Toosey	5,780	
2	Meadow reserve	Cariboo district, about five miles northwest of the Indian village, on reserve No. 1.	"	560	100 inches of water recorded from Riské creek ; 200 inches of water recorded from Mackin creek. Allotted by Commissioner O'Reilly, July 13, 1887. Surveyed, 1894. Final confirmation, April 23, 1895.
3		Cariboo district, about two miles above the mouth of Riské creek and on the right bank of Fraser river.	"	12·25	
1	Williams Lake	Cariboo district, east of the head or eastern end of Williams lake.	Williams Lake	4,074	1,464 acres of this reserve were purchased by the Dominion government from the 'Bates Estate' on March 5, 1881, for the use of the Indians. This reserve includes a lake made by the Indians to obtain a water supply.
2		Cariboo district, one and three-eighth miles north of reserve No. 1.	"	120	
3	Meadow reserve	Cariboo district, two miles northeast of reserve No. 2.	"	180	
4	Fishery reserve	Cariboo district, on the left bank of Fraser river, at the confluence of San José creek.	"	7	
5	"	Cariboo district, on the left bank of Fraser river, at the confluence of Chimney creek.	"	56	
6	Fishery	Cariboo district, at the foot of Williams lake, one quarter of a mile from the effluence of San José river.	"	6·50	
7	Grave-yard	Cariboo district, on the right bank of Chimney creek, on the property of Mr. Isnardy.	"	0·14	
8	"	Cariboo district, on the road from Williams lake to Soda creek and on the land owned by Mr. Pinchbeck.	"	0·25	Reserves Nos. 1—14, allotted by Commissioner O'Reilly, July 16, 1881. Surveyed, 1883. Final confirmation, June 4, 1884.
9	"	Cariboo district, on a trail from Williams lake to Soda creek, fifty links south of the southern boundary of Mr. Pinchbeck's land, lot 6.	"	0·16	
10	"	Cariboo district, seventy-five links south of reserve No. 9.	"	0.1	
11	"	Cariboo district, fifteen chains south of the southern boundary of Mr. Pinchbeck's land, lot 6.	"	0·17	
12	"	Cariboo district, north of the road from Williams lake to Soda creek, on Mr. Pinchbeck's land.	"	0·16	
13	"	Cariboo district, north of the road from Williams lake to Soda creek, on Mr. Pinchbeck's land.	"	0·9	
14	"	Cariboo district, near the outlet of Williams lake, on Mr. Pinchbeck's land.	"	0·3	
15	Carpenter Mountain	Cariboo district, at the 156 mile post on the Cariboo wagon road.	"	168·76	Allotted by Commissioner O'Reilly, November 26, 1894. Surveyed, 1897. Final confirmation, March 5, 1898.

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Dashken, Northwest Coast.	Hatch Point, Cowichan.
Deadman's Creek, Kamloops.	Haylate, Kwawkewlth.
Deadman's Island, Cowichan.	Hazelton, Babine.
Dead Point, Kwawkewlth.	Hesquiat, West Coast.
Deekyakus, West Coast.	Hiellen, Northwest Coast.
Deena, Northwest Coast.	Hisnit, West Coast.
Deep Creek, Williams Lake.	Hisnit (Nootka), West Coast.
Deep Valley, Fraser.	High Bar, Williams Lake.
Discovery Island, Cowichan.	Hleepte, West Coast.
Dochsupple, West Coast.	Hoiss, West Coast.
Dog Creek, Williams Lake.	Holachen, Fraser.
Dog Lake, Kamloops.	Homais, West Coast.
Dolphin Island, Northwest Coast.	Homalco, Fraser.
Doobah, West Coast.	Homayno, Kwawkewlth.
Dookqua, West Coast.	Homitan, West Coast.
Douglas, Fraser.	Hoonees, Northwest Coast.
Drew Harbour, Kwawkewlth.	Hope, Fraser.
Douglas Lake, Kamloops.	Hope Island, Kwawkewlth.
Duck Lake, Kamloops.	Hoquelget, Babine.
Dufferin, Kamloops.	Houpsitas, West Coast.
Echachis, West Coast.	Howeet, Northwest Coast.
Eelsesuklis, West Coast.	Humhampt, Kamloops.
Ehatis, West Coast.	Hunnaechin, Fraser.
Elcho, Northwest Coast.	Hustalen, Kamloops.
Elhlateese, West Coast.	Iktuksasuk, West Coast.
Enderby, Kamloops.	Ilclo, West Coast.
Enhalt, Kamloops.	Ilt-coola, Kamloops.
Enshesheese, Northwest Coast.	Ilthpay, West Coast.
Equis, West Coast.	Inkahtsaph, Kamloops.
Esowista, West Coast.	Inkluckcheen, Kamloops.
Esquimalt, Cowichan.	Inklvukkinatko, Kamloops.
Etsekin, Kwawkewlth.	Inlailawatash, Fraser.
Enquotco, Kamloops.	Isidore's Ranch, Kootenay.
False Creek, Fraser.	Ittatsoo, West Coast.
Finlayson Island, Northwest Coast.	Iusuk, West Coast.
Fish Lake, Kamloops.	Iwachis, West Coast.
Fish Lake, Williams Lake.	Jajustus, Northwest Coast.
Fort George, Babine.	Jalun, Northwest Coast.
Fort Rupert, Kwawkewlth.	Joekaska, Kamloops.
Fort Simpson, Northwest Coast.	Joenahumcheen, Kamloops.
Fountain, Williams Lake.	Kahkaykay, Fraser.
Four and one-half mile, Fraser.	Kahmoose, Kamloops.
Frank's, Fraser.	Kaikalahun, Fraser.
Fraser Island, Cowichan.	Kaitookwis, Kwawkewlth.
Fraser Lake, Babine.	Kakalatze, Cowichan.
Fulford Harbour, Cowichan.	Kakweken, Kwawkewlth.
Gelangle, Babine.	Kamloops, Kamloops.
Georgie, Northwest Coast.	Kanaka Bar, Kamloops.
Gilead, Kamloops.	Kaouk, West Coast.
Gitzault, Northwest Coast.	Kaoowinch, West Coast.
Glengla-ouch, Kwawkewlth.	Kappilano, Fraser.
Gleyka, Kwawkewlth.	Karlukwees, Kwawkewlth.
Goldstream, Cowichan.	Kashittle, West Coast.
Grand Rapids, Babine.	Katse, Northwest Coast.
Granite Island, West Coast.	Katit, Northwest Coast.
Grass Point, Kwawkewlth.	Katzie, Fraser.
Grassy Islet, Northwest Coast.	Kawkawa, Fraser.
Greenville, Northwest Coast.	Kaykaip, Fraser.
Greenwood Island, Fraser.	Kayouk, West Coast.
Grief Island, Northwest Coast.	Keecekiltum, Kwawkewlth.
Gwayasdums, Kwawkewlth.	Keecha, Northwest Coast.
Haines Island, West Coast.	Keeshan, West Coast.
Halhalaeden, Kamloops.	Keith Island, West Coast.
Halalt, Cowichan.	Kemano, Northwest Coast.
Halkett Island, Cowichan.	Kemisquit, Northwest Coast.
Hamilton Creek, Kamloops.	Keogh, (Fort Rupert) Kwawkewlth.
Hamilton Point, West Coast.	Keogh, (Gilford Island) Kwawkewlth.

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Kequesta, West Coast.
Keswar, Northwest Coast.
Keyahka, Northwest Coast.
Khrana, Northwest Coast.
Khtahda, Northwest Coast.
Khyes, Northwest Coast.
Kichha, Northwest Coast.
Kilchult, Williams Lake.
Kilcutseen, Northwest Coast.
Killalah, Northwest Coast.
Killootsal, Northwest Coast.
Kilpahlas, Cowichan.
Kincolith, Northwest Coast.
Kinmelet, Northwest Coast.
Kinnamax, Northwest Coast.
Kioosta, Northwest Coast.
Kippase, Kwawkewlth.
Kirby Point, West Coast.
Kisameet, Northwest Coast.
Kisgegas, Babine.
Kishnacous, West Coast.
Kispyox, Babine.
Kitasoo, Northwest Coast.
Kitimat, Northwest Coast.
Kitkahta, Northwest Coast.
Kitladamax, Northwest Coast.
Kitlawaoo, Northwest Coast.
Kitlope, Northwest Coast.
Kitseguecla Babine.
Kitseguecla, New, Babine.
Kitskahaws, Babine.
Kitwangar, Babine.
Kitwillucshilt, Northwest Coast.
Kitzowit, Kamloops.
Klaalth, Fraser.
Klaklacum, Fraser.
Klahkamich, Kamloops.
Klahkowit, Kamloops.
Klapthlon, Northwest Coast.
Klaskish, Kwawkewlth.
Kleetlekut, Kamloops.
Klehkoot, West Coast.
Kleyekwin, Fraser.
Kleykleyhouse, West Coast.
Klicksewy, Kwawkewlth.
Klickumcheen, Kamloops.
Kloklowuch, Kamloops,
Kokyet, Northwest Coast.
Koonwats, Babine.
Kooryet, Northwest Coast.
Kootenay, Lower, Kootenay.
Koetenay, Upper, Kootenay.
Kootowis, West Coast.
Kopchitchin, Kamloops.
Koqui, Northwest Coast.
Koqui-is, Kwawkewlth.
Kosé, Northwest Coast.
Kowtain, Fraser.
Ksha-oom, Northwest Coast.
Kshwan, Northwest Coast.
Ktsinet, Northwest Coast.
Kukwaywin, Fraser.
Kul, Northwest Coast.
Kuldoe, Babine.
Kullalth, Fraser.
Kullan, Northwest Coast.
Komcheen, Kamloops.
Kumowahdah, Northwest Coast.

Name of Reserve and Agency.

Kung, Northwest Coast.
Kunsoot, Northwest Coast.
Kunstamus, Kwawkewlth.
Kupchynalth, Kamloops.
Kuper, Cowichan.
Kwatlena, Northwest Coast.
Kwatsalix, Babine.
Kwawkwawapil. Fraser.
Kwetawkis, Kwawkewlth.
Kwotkelquo, Babine.
Kyarti, Northwest Coast.
Kykynalko, Kamloops.
Lackalsap, Babine.
Lackalsap, Northwest Coast.
Lachmach, Northwest Coast.
Lachtesk, Northwest Coast.
Lackaway, Fraser.
Lagins, Northwest Coast.
Lakahahmen, Fraser.
Laketown, Babine.
Lamb Island, Cowichan.
Lanas, Northwest Coast.
Langley, Fraser.
Lawauth, Kwawkewlth.
Leon Creek, Williams Lake.
Lewis Creek. Kamloops.
Little Springs, Williams Lake.
Lockla, Fraser.
Logan's, Kamloops.
Long Lake, Kamloops.
Long Tunnel, Kamloops.
Loon Lake, Kamloops.
Loon Lake, Williams Lake.
Loughborough, Kwawkewlth.
Lukseetsissum, Fraser.
Lulu, Kamloops.
Lyacksum, Cowichan.
Maahpe, West Coast.
Macoah, West Coast.
Machta, West Coast.
Mahope, West Coast.
Mahmalillikulla, Kwawkewlth
Mahpahkum, Kwawkewlth.
Mahtinicht, Kwawkewlth.
Maka, Kamloops.
Mahlachan, West Coast.
Malahut, Cowichan.
Malksope, West Coast.
Mamaquum Island, Fraser.
Marble Canyon, Williams Lake.
Markale, West Coast.
Marktosis, West Coast.
Masit, West Coast.
Massett, Northwest Coast.
Matchlee, West Coast.
Matlaten, Kwawkewlth.
Matsayno, Kwawkewlth.
Matsqui, Fraser.
Mauvais Rocher, Kamloops.
Mayne Island, Cowichan.
McCartney's Flat, Williams Lake.
McLean's Lake, Kamloops.
McLeod Lake, Babine.
McMillans Island, Fraser.
Me-agwan, Northwest Coast.
Me-aulaw, Northwest Coast.
Meetup, Kwawkewlth.
Metlakatla, Northwest Coast.
Mission, Fraser.

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Name of Reserve and Agency.	Name of Reserve and Agency.
Mission Creek, Kamloops.	Openit, West Coast.
Mission Island, West Coast.	Opitsat, West Coast.
Mooyah, West Coast.	Oregon Jack Creek, Kamloops.
Morteen, Fraser.	Orford Bay, Fraser.
Moutcha, West Coast.	Oschawwinna, Babine.
Moyehai, West Coast.	Osooyoos, Kamloops.
Mushkin, Fraser.	Otsawlas, Kwawkewlth.
Musqueam, Fraser.	Otter Lake, Kamloops.
Naden, Northwest Coast.	Ouchtum, Kwawkewlth.
Nananahout, Kamloops.	Ououkinish, West Coast.
Nahamanak, Kamloops.	Ous, West Coast.
Nahlquonate, Babine.	Outs, West Coast.
Nahwitti, Kwawkewlth.	Owhwistooawan, Kwawkewlth.
Nanaimo, Cowichan.	Owossitsa, West Coast.
Nanaimo River, Cowichan.	Oyakumla, Kwawkewlth.
Nancut, Babine.	Pa-aat, Northwest Coast.
Nanoose, Cowichan.	Pacat'llinna, Kwawkewlth.
Narcisse's Farm, Kamloops.	Pachena, West Coast.
Natley, Babine.	Pahas, Kwawkewlth.
Naykikoulth, Kamloops.	Papekwatchin, Fraser.
Neciat, Williams Lake.	Papsilqua, (Nicola), Kamloops.
Necoslie, Babine.	Papsilqua, (Spuzzum), Kamloops.
Nedoats, Babine.	Papyum, Kamloops.
Neekas, Northwest Coast.	Paukeanum, Fraser.
Nehalliston, Kamloops.	Pauls, Kamloops.
Nekite, Kwawkewlth.	Pauls Basin, Kamloops.
Neklipton, Kamloops.	Pavilion, Williams Lake.
Nemaih, Williams Lake.	Paykulkum, Fraser.
Nepa, Kamloops.	Peg-leg, Kamloops.
Nequotque, Williams Lake.	Pelloolthkai, Kwawkewlth.
Nesikep, Kamloops.	Pemberton, Fraser.
Neskainlith, Kamloops.	Pemynoos, Kamloops.
Nesuk, West Coast.	Pender Island, Cowichan.
Netsawgreece, Babine.	Peneece, Kwawkewlth.
New Kitseguecla, Babine.	Peneelth, West Coast.
Nickeyeah, Kamloops.	Penticton, Kamloops.
Nicklepalm, Kamloops.	Pentledge, Cowichan.
Nicoelton, Kamloops.	Perrets, Fraser.
Nicola Mameet, Kamloops.	Pintce, Babine.
Nicola Lake, Kamloops.	Pipscul, Kamloops.
Nicomen, Kamloops.	Pitt Lake, Fraser.
Nine-Mile Creek, Kamloops.	Point Veitch, Northwest Coast.
Nkaish, Kamloops.	Pokheitsk, Kamloops.
Nocut, Babine.	Poo-eyelth, Kamloops.
Nocten, Kamloops.	Popkum, Fraser.
Nohomeen, Kamloops.	Poquiosen, Fraser.
Nooaitch, Kamloops.	Portier Pass, Cowichan.
Noonla, Babine.	Port Harvey, Kwawkewlth.
Nooseseck, Northwest Coast.	Port Neville, Kwawkewlth.
Noota, Northwest Coast.	Potato Point, Fraser.
North Bay, Kamloops.	Payam, Fraser.
North Thompson, Kamloops.	Priests' Valley, Kamloops.
Nuchaquis, West Coast.	Puckatholechin, Fraser.
Nuchatle, West Coast.	Putkwa, Kamloops.
Numukamis, West Coast.	Quaal, Northwest Coast.
Nunautin, Kamloops.	Qua-aout, Kamloops.
Oalthkivim, Fraser.	Qua-ee, Kwawkewlth.
Occosh, West Coast.	Qualark, Fraser.
Oclucje, West Coast.	Qualicum, Cowichan.
Ohamil, Fraser.	Quartcha, Northwest Coast.
Oinimitis, West Coast.	Quatleyo, Kwawkewlth.
Okanagan, Kamloops.	Quat-tishe, Kwawkewlth.
Oke, West Coast.	Quay, Kwawkewlth.
Oke-amin, West Coast.	Quesnel, Williams Lake.
Omo-ah, West Coast.	Quequa, Fraser.
Onadsilth, West Coast.	Quilcheena, Kamloops.
105 Mile, Kamloops.	Quillanton, Kamloops.
Oo-oolth, West Coast.	Quinaquilth, West Coast.
Opatseah, West Coast.	Quinsam, Kwawkewlth.
Open Bay, Kwawkewlth.	Quisitis, West Coast.

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Quortsawe, West Coast.
Red Cliff, Northwest Coast.
Rich Bar, Williams Lake.
Ropers Meadow, Williams Lake.
Ruby Creek, Fraser.
Saagoombahlah, Kwawkewlth.
Saaiyouck, Kwawkewlth.
Saanich East, Cowichan.
Saanich South, Cowichan.
Sachawil, West Coast.
Sachsa, West Coast.
Sachteen, Fraser.
Sackanitecla, Babine.
Sackum, Kamloops.
Sahhahcum, Fraser.
Sahhahltkum, Kamloops.
Sal'ahquo, Babine.
Sallalus, Fraser.
Salmon Bay, Fraser.
Salmon Lake, Kamloops.
Salmon River, Kamloops.
Salmon River, Kwawkewlth.
Samahquam, Fraser.
Sampsons Meadow, Williams Lake.
Sand Island, Northwest Coast.
Saouk, West Coast.
Sarque, West Coast.
Satunquin, Northwest Coast.
Saturna Island, Cowichan.
Saughanaught, Fraser.
Scamakounst, Northwest Coast.
Scaucy, Kamloops.
Schelowat, Fraser.
Schkam, Fraser.
Scotch Creek, Kamloops.
Scowban, Northwest Coast.
Scowlitz, Fraser.
Scuttsap, Northwest Coast.
Seabird Island, Fraser.
Seah, Kamloops.
Seaichem, Fraser.
Sea Island, Fraser.
Seako, Northwest Coast.
Seaspunkut, Babine.
Seektukis, West Coast.
Sekaleton, Fraser.
Semach, Kwawkewlth.
Semiahmoo, Fraser.
Senanus Island, Cowichan.
Seshelt, Fraser.
Seton Lake, Williams Lake.
Seymour Creek, Fraser.
Shackan, Kamloops.
Shawniken, Kamloops.
Sheganny, Northwest Coast.
Shell Island, Kwawkewlth.
Shingle Point, Cowichan.
Shook, Kamloops.
Shoowahtlans, Northwest Coast.
Shoskhost, Kamloops.
Shrypitlahooks, Kamloops.
Shumarl, Northwest Coast.
Shumart, West Coast.
Shu-ouchten, Kamloops.
Shuswap, Kootenay.
Siaken, Fraser.
Sicamous, Kamloops.
Sic-e-dach, Babine.
Silicon, Williams Lake.

Name of Reserve and Agency.

Siska Flat, Kamloops.
Skaigha, Northwest Coast.
Skamain, Fraser.
Skwawahlook, Fraser.
Skawhalum, Fraser.
Skaynaneichst, Kamloops.
Skedan, Northwest Coast.
Skeikut, Kamloops.
Skemeoskuankin, Kamloops.
Skhpowiz, Kamloops.
Skidegate, Northwest Coast.
Sklahhesten, Fraser.
Skookum Chuck, Fraser.
Skoonkoon, Kamloops.
Skowishin, Fraser.
Skuet, Kamloops.
Skulkayn, Fraser.
Skumalasph, Fraser.
Skuppah, Kamloops.
Skutz, Cowichan.
Skwah, Fraser.
Skwahla, Fraser.
Skwali, Fraser.
Swawkweehm, Fraser.
Skway, Fraser.
Skwayaynope, Kamloops.
Skweahm, Fraser.
Skwulwailum, Fraser.
Slayathlum, Fraser.
Sleetsis, Kamloops.
Sliammon, Fraser.
Slooks, Northwest Coast.
Slosh, Williams Lake.
Smeohalin, Fraser.
Soda Creek, Williams Lake.
Soldatquo, Kamloops.
Songhees, Cowichan.
Sooke, Cowichan.
Soowahlie, Fraser.
Sowchea, Babine.
Soyandostar, Babine.
Spahomin Creek, Kamloops.
Spakels, Northwest Coast.
Spatsim, Kamloops.
Speous, Kamloops.
Speyum, Kamloops.
Spilmouse, Williams Lake.
Spintlum Flat, Kamloops.
Spuzzum, Kamloops.
Squaam, Kamloops.
Squawtits, Fraser.
Squamish Island, Fraser.
Squawkum, Fraser.
Squeah, Fraser.
Squetankilhats, Kamloops.
Squiala, Fraser.
Squianny, Kamloops.
Squinlixstat, Babine.
Staiyahanny, Kamloops.
Staquo, Northwest Coast.
Stawamus, Fraser.
Stellaquo, Babine.
Steyumwhulpa, Kamloops.
Stevan, Babine.
Stlackament, Kamloops.
Stone, Williams Lake.
Stony Creek, Babine.
Stony Point, Northwest Coast.
Stryen, Kamloops.

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Stullawheets, Fraser.
Suahbin, Fraser.
Sucwoa, West Coast.
Sumass, Fraser.
Sutaquis, West Coast.
Swan Lake, Kamloops.
Swaycalse, Fraser.
Swaywelit, Fraser.
Sweeteen, Fraser.
Switsemalph, Kamloops.
Ta-a-ack, Kwawkewlth
Tackuan, Northwest Coast.
Tahla, Northwest Coast.
Tahsis West Coast.
Tahsish, West Coast.
Talahaat, Northwest Coast.
Tateuse, Northwest Coast.
Talcony, Northwest Coast.
Tancoah, Northwest Coast.
Tanoo, Northwest Coast.
Tatchu, West Coast.
Tatpooose, Fraser.
Tatselawas, Babine,
Tchahcheelailthanum, Fraser.
Teahmit, West Coast.
Teequaloose, Kamloops.
Teeslee, Babine.
Teeta, Kwawkewlth.
Telaise, Kwawkewlth.
Tent Island, Cowichan.
Tequa, West Coast.
Thatce, Babine.
Thomas Point, Kwawkewlth.
Three Islands, Fraser.
Tabacco Plains, Kootenay.
Toby Lake, Williams Lake.
Tokenatch, Fraser.
Toon, Northwest Coast.
Toops, Kamloops.
Toosey, Williams Lake.
Tootoowiltena, West Coast.
Toowartz, Northwest Coast.
Tork, Fraser.
Towinock, Williams Lake.
Trafalgar Flat, Fraser.
Tashaheh, West Coast.
Tasikwie, Kwawkewlth.
Tsak, Babine.
Tsakis, Kwawkewlth.
Tsarksis, West Coast.
Tsaukan, Kamloops.
Tsauwaie, Kwawkewlth.
Tsawawmuck, Kwawkewlth.
Tsawcome, Fraser.
Tsawwassen, Fraser.
Tseatah, Fraser.
Tseeoowa'h, West Coast.
Tsinkahtl (Cooks Ferry), Kamloops.
Tsinkaht'l (Boothroyds), Kamloops.
Tsimlairen, Northwest Coast.
Tsinmanweenclist, Northwest Coast.
Tsinstikeptum, Kamloops.
Tsintach, Northwest Coast.
Tsitsk, Babine.
Tsooadie, Fraser.

Name of Reserve and Agency.

Tsoogunya, Babine.
Tsowwin, West Coast.
Tsulquate, Kwawkewlth.
Tsuquanah, West Coast.
Tuckkwiowhum, Kamloops.
Tugwell Island, Northwest Coast.
Tumbah, Babine.
Tymgowzan, Northwest Coast.
Tzartlam, Cowichan.
Tzeachten, Fraser.
Ucausley, Babine.
Ucluth, West Coast.
Ulkah, Babine.
Umliisle, Babine.
Umpukpulquatum, Kamloops.
Union Bay, Cowichan.
Upsowis, West Coast.
Uzta, Babine.
Village Bay, Kwawkewlth.
Village Island, West Coast.
Village Island, Cowichan.
Vermilion Forks, Kamloops.
Wahleach Island, Fraser.
Wahous, West Coast.
Waiwakum, Fraser.
Wappook, West Coast.
Watta, West Coast.
Waump, Kwawkewlth.
Wawelth, Northwest Coast.
Wawwat'l, Kwawkewlth.
Wekellals, Northwest Coast.
Werkinelek, Northwest Coast.
Whonock, Fraser.
Whyeek, Kamloops.
Willaclough, Northwest Coast.
Williams Lake, Williams Lake,
Wilnascancaud, Northwest Coast.
Wilskaskammel, Northwest Coast,
Winche, West Coast.
Witsimagon, Northwest Coast.
Wokitsas, West Coast.
Wolf Creek, Kamloops.
Wolf Island, Cowichan.
Wyah, West Coast.
Woclese, Kwawkewlth.
Wycott's Flat, Williams Lake.
Wya, West Coast.
Yaalstrick, Fraser.
Yagan, Northwest Coast.
Yakats, West Coast.
Yakh'lkaywalick, Kamloops.
Yakweakwioose, West Coast.
Yale, Fraser.
Yan, Northwest Coast.
Yarksis, West Coast.
Yatze, Northwest Coast.
Yekwaupsum, Fraser.
Yelakin, Kamloops.
Yellertlee, Northwest Coast.
Yensischuck, Babine.
Yookwitz, Fraser.
Yuquot, West Coast.
Zacht, Kamloops.
Zaulzap, Northwest Coast.
Zoht, Kamloops.

CENSUS RETURN

CENSUS RETURN of Resident and Nomadic Indians; Denominations to which they number of Pagans in the Dominion of Canada,

PROVINCE

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Algonquins, Golden Lake	97	.....	.....	.....	97	.....	.....	.....	.....
" Renfrew, North	286	.....	.....	.....	.....	.....	.....	.....	.....
Chippewas of the Thames	469	240	.....	227	.....	2	.....	.....	.....
" Walpole Island	625	396	.....	214	10	.....	.....	.....	5
" and Pottawattamies of Sarnia.	349	62	.....	285	2	.....	.....	.....	.....
" " of Kettle and Stony Points	95	9	.....	86	.....	.....	.....	.....	.....
" Georgina and Snake Islands	115	.....	.....	115	.....	.....	.....	.....	.....
" Rama	235	3	.....	217	15	.....	.....	.....	.....
" Saugeen	366	2	.....	255	30	.....	79	.....	.....
" Nawash	383	16	.....	239	128	.....	.....	.....	.....
" Beausoleil	261	.....	.....	177	84	.....	.....	.....	.....
Iroquois and Algonquins of Watha (Gibson)	130	.....	.....	120	9	.....	.....	1	.....
Moravians of the Thames	346	78	1	67	.....	.....	.....	200	.....
Mississaguas of Mud Lake	165	.....	.....	165	.....	.....	.....	.....	.....
" Rice Lake	81	.....	.....	81	.....	.....	.....	.....	.....
" Scugog	38	.....	.....	38	.....	.....	.....	.....	.....
" Alnwick	231	7	.....	222	2	.....	.....	.....	.....
" New Credit	244	8	6	204	.....	12	.....	14	.....
Mohawks of the Bay of Quinté	1,265	1,124	140	.....	.....	.....	.....	.....	1
Munsees of the Thames	122	54	.....	68	.....	.....	.....	.....	.....
Oneidas of the Thames	784	241	.....	543	.....	.....	.....	.....	.....
Pottawattamies of Walpole Island	179	74	.....	100	.....	.....	.....	.....	5
Ojibbewas and Ottawas of Manitoulin and Cockburn Islands at :—									
Cockburn Island	56	.....	.....	.....	56	.....	.....	.....	.....
Sheshegwaning	163	15	.....	.....	148	.....	.....	.....	.....
West Bay	327	.....	.....	.....	327	.....	.....	.....	.....
Sucker Creek	100	82	.....	.....	18	.....	.....	.....	.....
South Bay	65	.....	.....	.....	65	.....	.....	.....	.....
Sheguiandah	87	69	.....	.....	18	.....	.....	.....	.....
Sucker Lake	14	.....	.....	.....	14	.....	.....	.....	.....
Wikwemikong (unceded) / Wikwemikongsing (unceded)	1,125	.....	.....	.....	1,125	.....	.....	.....	.....
Obidgewong	7	.....	.....	.....	.....	.....	.....	.....	7
Ojibbewas of Lake Superior at :—									
Fort William	297	.....	.....	.....	237	.....	.....	.....	60
Red Rock or Helen Island	215	39	.....	.....	176	.....	.....	.....	.....
Pays Plat	45	.....	.....	.....	45	.....	.....	.....	.....
Lake Nipigon	517	17	.....	.....	176	.....	.....	.....	324
Pic River	220	5	.....	.....	215	.....	.....	.....	.....
Long Lake	326	60	.....	.....	265	.....	.....	.....	1
Michipicoten and Big Heads	331	160	.....	4	167	.....	.....	.....	.....
Ojibbewas of Lake Huron at :—									
Thessalon River	145	.....	.....	.....	145	.....	.....	.....	.....
Maganettawan	110	.....	.....	.....	110	.....	.....	.....	.....
Spanish River No. 1	218	6	.....	.....	205	.....	.....	.....	7
" No. 2	104	27	.....	.....	77	.....	.....	.....	.....
" No. 3	341	.....	.....	.....	341	.....	.....	.....	.....
Whitefish Lake	155	.....	.....	16	134	.....	.....	.....	5
Mississagi River	162	.....	.....	.....	161	.....	.....	.....	1
Point Grondin	59	.....	.....	6	53	.....	.....	.....	.....
Serpent River	113	.....	.....	.....	113	.....	.....	.....	.....
French River	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carried forward	12,168	2,794	147	3,449	4,768	14	79	215	416

SESSIONAL PAPER No. 27

RETURN.

belong, with approximate number belonging to each Denomination, as well as the by Provinces, for the Year ended June 30, 1901.

OF ONTARIO.

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
12	11	12	9	3	6	18	21	....	5	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Religion and ages unknown; no agent.
28	24	43	41	31	19	134	131	9	9	
43	44	58	59	44	47	162	160	3	5	
20	17	29	38	24	29	86	83	8	15	
9	14	10	10	4	2	25	18	1	2	
6	6	9	10	5	6	32	32	4	5	
17	19	22	28	12	14	50	60	6	7	
26	26	31	30	20	24	88	91	15	15	
18	12	37	29	23	15	115	118	5	11	
17	25	24	28	13	14	66	65	3	6	
7	11	14	21	9	9	31	25	1	2	
30	37	39	31	18	19	86	84	1	1	
17	16	23	9	13	6	45	33	.....	3	
5	9	11	5	5	3	21	18	1	3	
4	6	1	4	3	1	6	11	.....	2	
16	13	22	25	17	7	59	61	6	5	
16	14	30	19	13	9	58	64	9	12	
86	105	123	125	70	64	316	344	13	19	
9	10	12	9	6	5	34	28	5	4	
66	54	86	65	36	29	230	184	20	14	
9	13	17	19	12	15	45	40	6	3	
5	7	9	5	5	3	10	9	1	2	
16	13	13	13	17	15	36	35	2	3	
14	25	27	32	29	22	75	84	9	10	
7	5	14	7	9	2	23	26	3	4	
6	1	6	12	6	3	10	19	1	1	
5	7	10	12	3	3	24	19	3	1	
.....	.....	.....	1	.	4	2	4	2	1	
134	152	117	134	107	83	178	144	28	48	
.....	.....	.....	.....	1	.....	3	2	.....	1	
17	21	33	32	20	11	65	84	7	7	
11	19	34	13	8	12	51	59	6	2	
2	4	9	4	2	5	6	12	....	1	
33	45	86	62	36	27	94	121	7	6	
16	18	25	26	19	11	48	50	1	6	
21	26	42	52	14	19	56	79	8	9	
39	39	36	30	10	10	72	80	12	3	These are the figures for 1900; no return from new agent.
6	6	16	14	12	10	28	44	6	3	
9	11	6	11	6	8	27	32	.....	.....	Only 27 members of this band reside on the reserve, the remainder reside on Manitoulin Island.
21	18	28	23	16	15	38	49	6	4	
9	8	13	11	8	7	20	25	2	1	
35	28	32	55	20	13	71	83	2	2	
10	10	23	20	8	3	30	43	7	1	
10	12	14	15	14	19	26	39	7	6	
6	3	4	6	3	.. ..	12	18	2	5	
15	12	9	5	7	9	24	24	2	6	
.....	.....	.....	.....	.....	.....	.....	.....	... ..	.....	Reserve not occupied
908	976	1,259	1,209	761	657	2,736	2,855	240	281	

CENSUS

CENSUS RETURN of Resident and Nomadic Indians;

PROVINCE OF

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Brought forward	12,168	2,794	147	3,449	4,768	14	79	215	416
Tahgaiwinini	188				188				
Whitefish River	90	57			33				
Parry Island	107			49	36				22
Shawanaga	105			75	30				
Henvey Inlet	165			46	119				
Lake Nipissing	200				200				
Temogaming	86				86				
Dokis	79				79				
Garden River	436	139		1	296				
Batchewana Bay	350	4		6	340				
Six Nations on the Grand River	4,010	1,512		625		796	6	143	928
Wyandottes of Anderdon	6								
Chippewas and Saulteaux of Treaty No, 3, at :—									
Hungry Hall No. 1	33	8							25
" No. 2	20	2			1				17
Long Sault No. 1	30	6							24
" No. 2	52	7							45
Manitou Rapids No. 1	77								77
" No. 2	31								31
Little Forks	47	3							44
Couchiching	134	3			102				29
Stangecoming	52	1							51
Niacatchewenin	55								55
Nickickonsemenecanning	56	2			5				49
Rivière la Seine	126								126
Lac la Croix	109				3				106
Lac des Mille Lacs	77				1				76
Kawaiagamot (Sturgeon Lake)	31								31
Wabigoon	89	1			4				84
Frenchman's Head	139	114			17				8
Lac Seul	351	293			28				30
Wabuskang	70	34			9				27
Grassy Narrows	110	11			58				41
Eagle Lake	64	4			5				55
The Dalles	61	24			25				12
Islington	158	122			4				32
Rat Portage	71	5			9				57
Northwest Angle No. 37	100	7			1				92
" No. 33	53								53
" No. 34	19								19
Big Island	148	1			2				145
Assabasca	152	1			2				149
Whitefish Bay	50	1			11				38
Shoal Lake No. 40	65				1				64
" No. 39	79	1			1				77
Indians at Ignace	64				48				16
Total	20,763	5,157	147	4,251	6,512	810	85	358	3,151

SESSIONAL PAPER No. 27

RETURN.

Denomination to which they belong, &c.—*Continued.*

ONTARIO—*Concluded.*

Under 6 Years.		From 6 to 15 Yrs., Inclusive.		From 16 to 20 Yrs., Inclusive.		From 21 to 65 Yrs., Inclusive.		From 65 Years Upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
908	976	1,259	1,209	761	657	2,736	2,855	240	281	
9	18	33	27	13	5	36	45	1	1	
10	10	8	16	2	1	23	17	.....	3	
8	6	16	9	4	4	25	33	1	1	
9	8	10	14	3	3	24	34	.....	.....	
11	8	20	14	4	8	47	52	.....	1	
21	15	21	23	6	8	47	59	.....	.....	
5	6	5	5	5	3	21	36	.....	.....	
6	7	8	7	5	2	17	25	1	1	
30	32	44	40	26	29	103	112	9	11	These are the figures for 1900; no return from new agent.
25	26	22	19	28	20	93	100	11	6	
229	299	412	394	234	203	1,096	1,007	64	72	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Religion unknown; no details.
2	1	7	2	1	1	8	11	.....	.....	
.....	3	.....	2	.....	1	6	8	.....	.....	
2	3	1	5	1	1	7	8	1	1	
2	4	3	4	2	4	12	17	2	2	
5	5	6	7	7	5	19	19	1	3	
...	3	6	1	1	2	8	5	3	2	
3	2	3	4	3	6	11	11	1	3	
9	9	17	10	4	7	32	36	4	6	
3	4	6	13	1	5	9	10	1	.....	
4	6	10	6	1	3	10	14	.....	1	
4	4	10	7	2	2	12	13	.....	2	
9	10	14	20	8	6	20	30	7	2	
7	6	14	17	4	10	14	31	4	2	
3	12	10	11	3	10	13	14	.....	1	
5	1	5	2	.....	1	7	6	1	3	
3	6	7	11	8	4	20	28	1	1	
16	15	13	17	5	5	34	28	3	3	
36	42	49	39	18	10	77	69	6	5	
7	8	6	12	1	3	14	16	1	2	
8	12	10	7	6	8	27	28	3	1	
8	4	8	5	2	2	18	15	2	.....	
4	5	10	4	1	2	16	15	1	3	
15	13	13	15	6	7	46	35	3	5	
11	4	5	7	1	1	16	19	3	4	
2	7	11	17	9	4	19	25	2	4	
6	2	5	8	.....	2	12	12	2	4	
.....	2	1	1	.....	.....	5	8	1	1	
19	9	20	18	11	4	31	31	1	4	
10	12	13	16	6	10	35	40	4	6	
3	2	4	8	3	5	11	13	1	.....	
9	4	10	6	4	3	13	15	.....	1	
9	11	6	4	3	5	17	22	1	1	
5	4	9	4	4	1	15	16	5	1	
1,500	1,646	2,170	2,087	1,217	1,083	4,882	5,043	392	451	

CENSUS RETURN of Resident and Nomadic Indians ;

PROVINCE OF

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Abenakis of St. Francis	345	52	.....	...	257	1	....	33	2
" Becancour	51	.....	.....	.....	51	....	....	.....	.....
Algonquins of River Desert	396	...	.....	.....	396	.....	.....	.....	....
" Temiscaming	202	...	.....	.....	202	.....	.....	.....	.....
Têtes de Boule of St. Maurice, on Lake Manouan, County of Champlain	74	.....	.....	....	74	.....	.....	.....	.....
Têtes de Boule of St. Maurice, on Weymontaching and Coucouache reserves, County of Champlain	84	.....	.....	.....	84	.....	.....	.....	.....
Têtes de Boule of St. Maurice, at Okickendatch, County of Champlain	92	.....	.....	.....	92	.....	.....	.....	.....
Pontiac, unorganized	230	.....	.....	.....	.....	.....	.....	.....	.....
County of Ottawa	1,063	.....	.....	.....	.....	.....	.....	.....	.....
Amalecites of Viger	103	.....	.....	.....	103	.....	.....	.....	.....
Hurons of Lorette	454	1	3	.....	450	.....	.....	.....	.....
Iroquois of Caughnawaga	1,992	2	.....	33	1,957	.....	.....	.....	.....
" St. Regis	1,367	.....	.....	139	1,228	.....	.....	.....	.....
Iroquois and Algonquins of Lake of Two Mountains	452	.....	.....	265	183	.....	4	.....	.....
Micmacs of Maria	102	.....	.....	.....	102	.....	.....	.....	.....
" Restigouche	474	.....	.....	.....	474	.....	.....	.....	.....
Indians of Labrador Peninsula, viz :—									
Montagnais and Naskapees at—									
Bersimis (Betsiamits)	448	.....	.....	.....	448	.....	.....	.....	.....
Escoumains	40	.....	.....	.....	40	.....	.....	.....	.....
Natashquan	43	.....	.....	.....	43	.....	.....	.....	.....
Godbout	40	.....	.....	.....	40	.....	.....	.....	.....
Grand Romaine and Musquaro	306	.....	.....	.....	306	.....	.....	.....	.....
Lake St. John	508	32	.....	.....	476	.....	.....	.....	.....
Mingan	132	.....	.....	.....	132	.....	.....	.....	.....
Seven Islands and Moise	377	.....	.....	.....	377	.....	.....	.....	.....
St. Anne de Labrador, Chicoutimi	45	.....	.....	.....	.....	.....	.....	.....	.....
Unorganized Territories	1,387	.....	.....	.....	.....	.....	.....	.....	.....
Amalecites in County of Quebec	31	.....	.....	.....	31	.....	.....	.....	.....
Abenakis "	12	.....	.....	.....	12	.....	.....	.....	.....
Abenakis in County of Charlevoix at St. Urbain	15	.....	.....	.....	15	.....	.....	.....	.....
Total	10,865	87	3	437	7,573	1	4	33	2

PROVINCE OF

Micmacs of Kent County at :—									
Big Cove	281	.....	.....	.....	281	.....	.....	.....	.....
Indian Island	40	.....	.....	.....	40	.....	.....	.....	.....
Buctouche	27	.....	.....	.....	27	.....	.....	.....	.....
Micmacs of Northumberland at :—									
Burnt Church	230	.....	.....	.....	230	.....	.....	.....	.....
Eel Ground	139	.....	.....	.....	139	.....	.....	.....	.....
Red Bank	50	.....	.....	.....	50	.....	.....	.....	.....
Carried forward	767	.....	.....	.....	767	.....	.....	.....	.....

Denominations to which they belong, &c.—*Continued.*

QUEBEC.

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
23	31	43	45	18	14	74	77	11	9	
2	1	3	.....	4	5	12	18	1	5	
23	31	38	42	28	30	93	98	4	9	
16	18	29	26	11	9	40	46	3	4	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No agent ; no details.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" " Religion unknown.
2	5	14	10	14	16	16	26	.....	.....	
50	41	50	47	33	27	98	96	5	7	
173	146	230	173	116	103	500	446	43	62	
163	165	138	140	70	88	275	269	29	30	
39	34	54	31	17	23	135	105	8	6	
10	12	15	10	7	6	18	21	2	1	
34	49	53	41	31	36	104	97	14	15	
38	51	48	49	29	32	105	84	6	6	
5	3	3	5	2	1	8	8	2	3	
7	2	8	3	2	3	9	9	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No details.
35	41	41	35	15	14	56	62	5	2	
48	37	63	68	39	36	111	90	10	6	
10	14	14	11	5	10	32	32	2	2	
33	53	46	35	28	17	77	75	5	8	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Religion unknown; no agent: no details.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Religion unknown; no agent; no details.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No details given by Agent Bastien.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
711	734	890	771	469	470	1,763	1,659	150	175	

NEW BRUNSWICK.

21	23	33	30	11	9	71	70	5	8	
5	4	7	7	1	.....	7	6	1	2	
1	2	2	5	2	.....	6	7	1	1	
20	15	26	18	6	6	61	60	7	11	
8	11	11	12	5	6	44	32	6	4	
4	2	8	6	1	1	13	12	1	2	
59	57	87	78	26	22	202	187	21	28	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians;

PROVINCE OF

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Brought forward	767				767				
Micmacs of Gloucester County at Bathurst	37				37				
" Restigouche " Eel River	48				48				
" Westmoreland " Fort Folly (reserve) and vicinity	74				74				
Amalecites of York County at :—									
St. Mary's	106				106				
Kingsclear	106				106				
Amalecites of Carleton County at Woodstock	63				63				
Amalecites of St. John County	14				14				
" Charlotte County at St. Andrews	26				26				
Amalecites of King's County at Apohaqui	31				31				
Micmacs of King's County at Norton Station	47				47				
Amalecites of Sunbury County at Oromocto	76				76				
" Queen's " Upper Gagetown	27				27				
Amalecites of Victoria County at Tobique	195				195				
" Madawaska County at Edmunston	38				38				
Total	1,655				1,655				

PROVINCE OF

Micmacs of Shelburne County at :—									
Jordan River	16				16				
Shelburne River	8				8				
Sable River	12				12				
Clyde River	1				1				
Barrington River	8				8				
Queen's County, temporarily :—									
Milton's	9				9				
Port Mouton	11				11				
Caledonia,..	2				2				
Port Joli	2				2				
United States	7				7				
Micmacs of Inverness County at :—									
Whycocomagh (reserve)	131				131				
Malagawatch "	22				22				
Micmacs of Colchester County at :—									
Millbrook (reserve)..	101				101				
Carr's Brook	6				6				
Stewiacke	2				2				
Micmacs of Hants County at Indian Brook (reserve)	85				85				
Micmacs of Cumberland County at :—									
Franklin Manor (reserve) and vicinity.	72				72				
Springhill Junction	9				9				
Amherst	16				16				
River Philip	5				5				
Carried forward	525				525				

SESSIONAL PAPER No. 27

Denominations to which they belong, &c.—*Continued.*

NEW BRUNSWICK—*Concluded.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
59	57	87	78	26	22	202	187	21	28	.....
2	3	4	5	1	1	6	9	3	3	
3	4	6	7	1	3	10	14	....	....	
4	5	11	10	6	3	17	14	2	2	
10	12	14	8	6	4	26	23	2	1	
6	8	13	10	13	6	23	24	1	2	
6	5	4	8	3	4	15	15	1	2	
2	....	2	2	.. .	1	2	4	.....	1	
2	1	2	2	2	5	6	6	.. ..	. ...	
4	3	6	3	1	2	6	6	. .	.....	
2	6	4	3	1	2	12	13	....	4	
6	7	8	8	3	2	21	17	2	2	
3	3	4	3	1	.....	4	8	1	.. ..	
16	21	17	21	7	6	51	46	6	4	
4	3	3	5	2	3	10	7	1	.....	
129	138	185	173	73	64	411	393	40	49	

NOVA SCOTIA.

2	6	9	10	7	5	20	12	2	3	
13	10	12	11	15	12	32	21	2	3	
.....	.....	5	3	1	5	6	2	... .	.....	
5	6	12	15	8	6	25	27	5	.....	
10	2	12	12	4	1	17	16	5	6	
6	4	6	8	5	6	14	16	5	2	
1	.....	1	.....	1	.....	4	2	.....	.....	
2	2	1	2	1	2	2	3	.....	1	
.....	1	.....	.. ..	1	1	.....	2	.....	.....	
39	31	58	61	43	38	120	101	19	15	

CENSUS RETURN of Resident and Nomadic Indians;

PROVINCE OF NOVA

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Brought forward.....	525	.....	.....	.....	525	.....	.....	.....	.....
Micmacs of Victoria County at Middle River (reserve).....	100	.....	.....	.....	100	.....	.....	.....	.....
Micmacs of Richmond County at Chapel Island (reserve).....	130	.....	.....	.....	130	.....	.....	.....	.....
Micmacs of Annapolis County at:—									
Lequille.....	22	.....	.....	.....	22	.....	.....	.....	.....
Mochelle.....	12	.....	.....	.....	12	.....	.....	.....	.....
Bridgetown.....	3	.....	.....	.....	3	.....	.....	.....	.....
Paradise.....	13	.....	.....	.....	13	.....	.....	.....	.....
Lawrencetown.....	3	.....	.....	.....	3	.....	.....	.....	.....
Middleton.....	24	.....	.....	.....	24	.....	.....	.....	.....
Micmacs of King's County at :—									
Kentville.....	20	.....	.....	.....	20	.....	.....	.....	.....
Berwick.....	10	.....	.....	.....	10	.....	.....	.....	.....
Blue Mountain.....	6	.....	.....	.....	6	.....	.....	.....	.....
Greenland.....	6	.....	.....	.....	6	.....	.....	.....	.....
Middleton.....	10	.....	.....	.....	10	.....	.....	.....	.....
Kingston.....	7	.....	.....	.....	7	.....	.....	.....	.....
Gaspereaux.....	10	.....	.....	.....	10	.....	.....	.....	.....
Black Rock.....	5	.....	.....	.....	5	.....	.....	.....	.....
Micmacs of Pictou County at :—									
Fisher's Grant (reserve).....	116	.....	.....	.....	116	.....	.....	.....	.....
Chapel Island "	38	.....	.....	.....	38	.....	.....	.....	.....
Micmacs of Digby County at :—									
Bear River (reserve).....	101	.....	.....	.....	101	.....	.....	.....	.....
Weymouth.....	26	.....	.....	.....	26	.....	.....	.....	.....
Micmacs of Antigonish County at :—									
Summerside.....	23	.....	.....	.....	23	.....	.....	.....	.....
Afton (reserve).....	82	.....	.....	.....	82	.....	.....	.....	.....
Pomquet "	50	.....	.....	.....	50	.....	.....	.....	.....
Micmacs of Guysborough County at Guysborough.....	31	.....	.....	.....	31	.....	.....	.....	.....
Micmacs of Lunenburg County at :—									
New Germany (reserve).....	54	.....	.....	.....	54	.....	.....	.....	.....
Bridgewater.....	18	.....	.....	.....	18	.....	.....	.....	.....
Lunenburg Town.....	12	.....	.....	.....	12	.....	.....	.....	.....
Gold River (reserve).....	10	.....	.....	.....	10	.....	.....	.....	.....
Micmacs of Queen's County at :—									
Milton.....	56	.....	.....	.....	56	.....	.....	.....	.....
Mill Village.....	13	.....	.....	.....	13	.....	.....	.....	.....
Wild Cat (reserve).....	7	.....	.....	.....	7	.....	.....	.....	.....
Greenfield.....	11	.....	.....	.....	11	.....	.....	.....	.....
Micmacs of Halifax County at :—									
Sheet Harbour.....	33	.....	.....	.....	33	.....	.....	.....	.....
Cow Bay, Cole Harbour (reserve).....	16	.....	.....	.....	16	.....	.....	.....	.....
Elmsdale.....	32	.....	.....	.....	32	.....	.....	.....	.....
Wellington, Bedford and Windsor Junction.....	51	.....	.....	.....	51	.....	.....	.....	.....
Micmacs of Cape Breton County.....	250	.....	.....	.....	250	.....	.....	.....	.....
" Yarmouth County.....	84	.....	.....	.....	84	.....	.....	.....	.....
Total.....	2,020	.....	.....	.....	2,020	.....	.....	.....	.....

SESSIONAL PAPER No. 27

Denominati ons to wh.ch they belong, &c.—*Continued.*

SCOTIA—*Concluded.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
39	31	58	61	43	38	120	101	19	15	
10	5	12	15	6	4	21	24	2	1	
6	13	18	17	9	13	27	20	5	2	
3	3	10	15	4	2	16	22	.....	2	
7	7	6	10	6	6	15	16	1	.....	
10	3	9	8	16	17	20	28	3	2	
3	3	3	4	5	3	7	7	1	2	
12	12	16	9	9	7	22	24	8	8	
13	15	17	25	10	15	42	38	7	4	
9	10	6	5	9	5	12	25	11	2	
6	9	12	17	10	17	9	3	2	2	
7	7	14	8	8	14	30	30	2	3	
22	26	30	32	32	30	30	32	3	5	Ages of 8 persons not given.
6	3	15	8	4	.....	20	24	2	2	
153	147	226	234	171	171	400	394	66	50	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians;

PRINCE ED

Indians.	Census Return.	Religion. Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Micmacs of Prince County at Lennox Island (reserve)	255				255				
Micmacs of King's County at Morell (reserve)	60				60				
Total	315				315				

PROVINCE OF BRITISH

WEST COAST AGENCY.									
Ahousaht	277		100		69				108
Clayoquot	240			28	148				64
Checklesit	118				58				60
Ehatisaht	101				41				60
Ewlbwiehaht	156		60		20				76
Hesquiat	154				154				
Howchuklisat	47		15		10				22
Kelsemaht	71				20				51
Kyuquot	341				200				141
Matchitlaht	62				28				34
Mooachtaht	185				105				80
Nitinat	212			150	20				42
Noochahtlaht	75				30				45
Oiaht	163		80		20				63
Opitchesaht	64		44		6				14
Pacheena	63				32				31
Toquaht	21		10						11
Tseshaht	130		66						64
Total	2,480		375	178	961				966
FRASER RIVER AGENCY.									
Aitchelitz	8			8					
Burrard Inlet, No. 3 reserve	30				30				
Cheam	101			1	100				
Chehalis	112	5			107				
Clahoose	72				72				
Coquitlam	26				26				
Douglas	75				75				
Ewa-woos	27				27				
False Creek	53				53				
Homalko	85				85				
Hope	87	2		2	83				
Katsey	78				78				
Kapilano	46				24				22
Kwawkwawapilt	17				17				
Langley	39				39				
Mission (Burrard Inlet)	169				169				
Musqueam	96			10	83				3
Matsqui	42				42				
New Westminster	65				65				
Carried forward	1,228	7		21	1,195				25

Denominations to which they belong, &c.—*Continued.*

WARD ISLAND.

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
33	41	26	20	19	10	54	43	4	5	
9	12	5	5	1	3	10	10	3	2	
42	53	31	25	20	13	64	53	7	7	

COLUMBIA.

27	20	33	22	8	7	72	71	8	9	
10	10	20	20	10	8	67	81	6	8	
9	10	10	9	4	3	34	33	5	1	
7	6	7	8	5	3	33	30	1	1	
13	13	15	14	6	4	46	39	2	4	
15	12	17	16	4	3	37	43	3	4	
3	4	3	4	2	2	11	15	2	1	
5	5	5	2	6	7	19	15	3	4	
15	10	22	19	7	6	121	114	17	10	
4	4	5	3	.....	3	19	21	2	1	
10	12	12	10	5	5	60	66	1	4	
11	14	11	30	6	5	57	63	8	7	
....	4	2	5	7	2	24	22	6	3	
12	12	12	12	3	3	47	51	5	6	
8	5	8	5	2	2	12	20	1	1	
4	3	6	5	1	4	16	19	1	4	
2	1	1	.. . .	1	1	7	7	1	.....	
8	10	18	14	5	4	25	32	10	4	
163	155	207	198	82	72	707	742	82	72	
.....	.....	.. .	.....	.....	.....	3	3	...	2	
2	. ....	3	4	.....	....	10	10	.....	1	
10	10	10	9	8	8	20	20	3	3	
16	12	3	2	5	2	31	31	7	3	
4	3	3	3	1	.... .	6	5	.....	1	
4	3	6	6	1	3	22	25	2	3	
1	2	2	3	.....	....	5	8	3	3	
2	3	3	1	4	1	17	16	3	3	
9	12	7	8	4	3	21	19	1	1	
6	4	7	6	3	3	26	28	3	1	
6	15	5	5	.....	1	21	20	2	3	
11	7	8	6	2	2	15	15	2	4	
3	3	1	1	2	1	15	15	3	2	
2	1	.....	.....	1	1	5	4	.....	3	
4	2	2	2	1	....	11	11	3	3	
29	18	15	10	6	8	38	41	2	2	
7	6	8	9	6	6	21	20	9	4	
5	5	5	5	1	1	8	8	2	2	
7	8	4	4	5	3	16	16	1	1	
128	114	92	84	50	43	321	315	46	45	

CENSUS RETURN of Resident and Nomadic Indians ;

PROVINCE OF BRITISH

Indians.	Census Return.	RELIGION. Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
FRASER RIVER AGENCY—*Con.*									
Brought forward	1,228	7		21	1,175				25
Nicomen	16				16				
Ohamil	57	9		3	45				
Pemberton Meadows	255				255				
Popcum	14	14							
Semiahmoo	32				32				
Sechelt	234				234				
Sumass	50			28	22				
Scowlitz	51				51				
Squiahla	14			2	12				
Skweahm	30				30				
Sliammon	102				102				
Squawtits	42	12		10	20				
Squamish, Howe Sound	27				8				19
Skwah	100			4	96				
Skookum Chuck	99				99				
Samahquam	75				75				
Skulkayu	33			26	7				
Skwawahlooks	23				23				
Seymour Creek	49			3	37				9
Skway	26	3			23				
Texas Lake	32	2			30				
Tchewassan	45				45				
Tsoowahlie	49			39	10				
Tyeachten	42	6		19	17				
Wharnock	25				25				
Yukkweakwioose	26			4	22				
Yale	83	20			63				
Total	2,859	73		159	2,574				53
BABINE AND UPPER SKEENA RIVER AGENCY									
Kitwangar	148	143							5
Kitwancool	64	58							6
Kitsegukla, (old and new village)	84			70				10	4
Getanmax, (Hazelton)	239	212						20	7
Kispyox	215			167				47	1
Kisgegas	260	180						30	50
Kuldoe	47	33							14
Moricetown (Lachalsap)	156				156				
Hoquelget Village	159				159				
Fort Babine	145				145				
Old Fort Babine	139				139				
Yucutce, (portage between Babine and Stuart Lake)	18				18				
Thatce	48				48				
Grand Rapids	16				16				
Tsisthainli, (Lac Trembleur)	13				13				
Pintce	45				45				
Stuart's Lake Village	172				172				
Fraser's Lake Village	89				89				
Stony Creek Village	98				98				
Fort George Village	122				122				
Tsistlatho, (Beach Water)	76				76				
McLeod's Lake	91				91				
Fort Grahame, (Nomadic)	95				95				
Connolly Lake "	118				118				
Na-anees, (two bands north of Connolly Lake, semi-nomadic)	152				152				
Total	2,809	626		237	1,752			107	87

Denominations to which they belong, &c.—*Continued.*

COLUMBIA—*Continued.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
128	114	92	84	50	43	321	315	46	45	
2	1	1	2	.....	.....	4	5	.....	1	
7	6	3	7	.....	1	17	14	2	.....	
21	37	27	19	9	7	61	63	6	5	
3	.....	4	.....	1	1	2	3	.....	.....	
1	1	3	3	1	1	9	9	2	2	
32	31	5	16	13	9	52	52	7	7	
4	7	2	1	3	2	14	12	4	1	
4	6	7	5	3	1	10	11	1	3	
1	1	1	3	.....	.....	3	5	.....	.....	
1	7	2	2	.....	.....	8	8	1	1	
16	9	13	11	...	6	20	15	8	4	
4	2	4	2	4	1	9	10	3	3	
4	.....	.....	2	.....	.....	7	9	5	.....	
8	6	9	14	5	6	24	21	3	4	
10	6	10	10	2	2	23	21	5	10	
6	6	6	9	4	5	15	18	4	2	
2	3	3	3	1	1	9	9	1	1	
1	5	.....	3	1	.....	6	5	1	1	
3	5	7	6	2	.....	14	12	.....	.....	
3	1	3	.....	.....	1	8	8	1	1	
2	4	1	7	1	2	8	6	1	.....	
6	2	7	2	.....	3	8	9	4	4	
3	6	4	5	2	2	12	11	2	2	
5	5	3	7	.....	1	9	10	2	.....	
2	1	2	2	.....	1	8	7	1	1	
.....	3	2	2	.....	2	7	6	1	3	
3	5	5	10	2	3	20	24	9	2	
282	280	236	237	104	101	698	698	120	103	
6	7	13	11	5	8	43	47	3	5	
6	5	6	8	2	3	15	16	3	.....	
8	6	8	6	6	2	20	20	5	3	
8	7	14	21	13	18	73	75	8	2	
10	9	7	15	11	10	70	69	7	7	
12	13	24	23	8	10	73	75	9	13	
3	2	4	5	1	1	11	10	4	6	
10	11	9	11	7	5	48	46	6	3	
10	9	11	12	5	8	44	46	7	7	
6	7	11	13	7	4	49	48	.....	.....	
8	8	12	14	6	9	39	41	1	1	
1	1	2	3	1	1	4	4	....	1	
5	5	3	3	3	2	10	12	2	3	
2	2	3	2	....	1	2	3	....	1	
1	..	2	1	1	1	4	3	.....	.....	
3	4	3	4	2	3	10	12	2	2	
5	7	16	17	8	6	53	51	5	4	
5	6	11	13	7	8	17	19	2	1	
5	4	7	10	9	10	26	23	1	3	
6	5	11	12	8	6	34	33	4	3	
4	4	6	7	6	4	22	19	2	2	
6	5	11	13	9	8	17	18	3	1	
5	7	9	11	5	6	25	24	2	1	
6	4	9	10	10	11	33	31	3	1	
10	8	12	15	9	7	41	42	6	2	
151	146	224	260	149	152	783	787	85	72	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians;

PROVINCE OF

Indians.	Census Return.	Religion.								
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
WILLIAMS LAKE AGENCY.									
Alexandria	60				60				
Alkali Lake	158				158				
Anaham	216				216				
Anderson Lake	65				65				
Bridge River	105				105				
Canoe Creek	154				154				
Cayoosh Creek No. 1	34				34				
Cayoosh Creek No. 2	15	15							
Clinton	44				44				
Dog Creek	15				15				
Fountain	202				202				
High Bar	50				50				
Kenim Lake	92				92				
Lillooet No. 1	74				74				
Lillooet No. 2	4	4							
Pavilion	68				68				
Quesnel	67				67				
Seton Lake Mission, No. 1	71				71				
" Enias, No. 2	2				2				
" Schloss, No. 5	34				34				
" Niciat, No. 6	53				53				
Soda Creek	80				80				
Stones	106				106				
Toosey	59				59				
Williams Lake	143				143				
Total	1,971	19			1,952				
NORTHWEST COAST AGENCY.									
Haida Nation—									
Massett	366	366							
Skidegate	262			262					
Nishgar Nation—									
Kincolith	265	265							
Kittex	31								31
Lackalsap	181			181					
Kitangata	34								34
Kitwintshilth	60								60
Aiyansh	133	133							
Kitlacdamax	139								139
Tsimpsean Nation—									
Fort Simpson	720			720					
Metlakatla	198	198							
Kitkatla	231	231							
Kitkaata	80			80					
Kitsumkalum	67			67					
Kitsalas	141			141					
Oweekayno Nation—									
Kitimat	263			263					
Kitlope	84			84					
China Hat	114			114					
Bella Bella	330			330					
Oweekayno	131			20					111
Tallion Nation—									
Kinisquit	77								77
Bella Coola	191			40					151
Tallion	43								43
Total	4,141	1,193		2,302					646

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Denominations to which they belong, &c.—*Continued.*

BRITISH COLUMBIA—*Continued.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
6	6	3	4	5	4	14	12	3	3	
17	17	8	9	12	16	32	38	5	4	
31	14	10	8	15	16	44	41	20	17	
5	6	3	3	5	7	18	16	1	1	
12	13	5	3	8	8	27	25	1	3	
14	13	7	6	15	17	34	36	3	9	
4	3	2	1	5	4	4	7	2	2	
3	1	2	.....	5	2	.....	2	.....	.....	
5	4	3	1	4	5	10	10	1	1	
3	.....	1	.....	2	3	2	2	1	1	
19	23	6	9	18	18	45	50	6	8	
5	5	3	3	5	5	10	8	3	3	
10	11	4	4	5	4	26	25	2	1	
6	5	4	3	3	4	25	23	1	.....	
.....	.....	1	.....	1	.....	1	1	.....	.....	
5	5	2	4	7	8	14	18	3	2	
10	3	3	2	6	5	16	13	5	4	
9	10	4	2	6	6	18	11	3	2	
.....	.....	.....	.....	.....	.....	1	1	.....	.....	
3	4	2	1	3	3	7	8	2	1	
6	5	3	2	5	3	13	13	2	1	
10	6	3	3	4	6	20	23	2	3	
11	16	2	4	8	9	25	27	3	1	
7	10	2	3	5	6	13	10	2	1	
11	13	5	8	6	10	38	40	7	5	
212	193	88	83	158	169	457	460	78	73	
31	33	28	27	24	25	87	86	12	13	
19	18	17	20	18	17	72	70	5	6	
18	17	21	20	14	13	76	75	6	5	
2	1	1	1	2	1	11	10	1	1	
18	16	17	18	14	13	37	36	6	6	
2	2	3	2	2	2	10	9	1	1	
3	3	4	4	1	3	20	19	1	2	
11	10	11	10	9	8	34	32	4	4	
6	5	6	6	4	5	47	52	4	4	
75	76	62	62	44	42	162	162	17	18	
18	16	17	16	10	9	55	54	1	2	
14	15	19	18	11	10	64	63	9	8	
5	5	7	6	5	4	23	22	1	2	
7	8	8	9	5	4	13	12	1	.....	
12	12	11	10	9	8	38	38	1	2	
13	13	20	19	17	15	76	77	6	7	
5	4	6	5	7	6	24	23	2	2	
10	12	13	12	9	8	26	22	1	1	
31	32	25	24	22	21	81	80	7	7	
7	6	7	5	7	7	44	45	1	2	
4	4	4	5	3	3	27	26	...	1	
10	11	14	13	9	8	59	60	3	4	
3	4	2	3	2	2	13	12	1	1	
324	324	323	315	248	234	1,099	1,085	91	99	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians; PROVINCE OF BRITISH

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
KOOTENAY AGENCY.									
Upper Kootenay—									
Lower Columbia Lake	70				70				
St. Mary's	198				198				
Tobacco Plains	57				57				
Flat Bow (Lower Kootenay)	169				169				
Kinbaskets (Shuswap Tribe)	54				54				
Total	548				548				
COWICHAN AGENCY.									
Sooke	23				23				
Cheerno	52				36			8	8
Esquimalt	17			9	8				
Songhees	105			24	81				
Malakut	14				14				
Tsehump	20				20				
Panquechin	64				64				
Tsartilp	63				63				
Tsanout	102				102				
Kilpanlus	4				4				
Comiakin	70				70				
Clemclemalets	141			34	107				
Khenipsim	54			18	36				
Koksilah	13				13				
Quamichan	300			54	206				40
Somenos	117			27	90				
Hellelt	25				25				
Siccameen	36				36				
Kulleets	66				66				
Lyacksum	88				88				
Lilmalche	18				18				
Penelakut	151				151				
Tsussie	55				55				
Nanaimo	166			166					
Snonowas	13			5					8
Qualicum	13			13					
Comox	61		60		1				
Galiano Island	31				31				
Mayne Island	27				27				
Discovery Island	33				33				
Cowichan Lake	2			2					
Total	1,944		60	352	1,468			8	56
KAMLOOPS–OKANAGAN AGENCY.									
Spuzzum	159	68			91				
Skuzzy	35				35				
Taqwayaum	73	35			38				
Kapatsitsan	52	52							
Sook-kamus	74	71			3				
Hlu-hlu-natan	56	56							
Siska	32	32							
Klick-um-cheen	137	137							
Nkya	71	71							
Nhumen	31	31							
Stryne	57	57							
Carried forward	777	610			167				

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Denominations to which they belong, &c.—*Continued.*

COLUMBIA.—*Continued.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
5	7	6	8	2	2	18	18	3	1	
17	21	21	18	7	10	46	48	5	5	
2	4	2	7	1	3	16	17	2	3	
14	18	21	12	5	4	45	46	3	1	
9	2	7	3	1	5	9	14	4	.....	
47	52	57	48	16	24	134	143	17	10	
2	.....	3	5	.....	.....	6	5	... .	2	
4	3	4	3	....	2	13	18	1	4	
.....	... .	2	3	.....	.....	4	8	... ..	... ..	
10	11	11	10	.....	1	30	32	.....	.....	
.....	.....	2	3	.....	.....	3	5	..	1	
.....	.....	.....	....	. ...	.....	8	9	2	1	
7	4	....	..	7	4	16	26	.....	.....	
.....	3	16	10	.....	.....	16	18	...	.....	
6	7	17	18	.....	.... .	24	30	.....	.....	
.....	.....	.....	.....	. .	.....	1	1	1	1	
3	2	4	6	.....	.. ..	26	28	. .	1	
6	7	21	14	2	...	45	46	.....	.....	
2	3	2	1	3	4	20	19	....	.. ...	
... ..	. .	2	....	... .	... .	6	5	.....	.....	
25	27	33	32	3	2	88	90	.... .	....	
18	19	9	7	3	4	27	30	.....	.....	
3	1	1	2	... .	.....	8	10	....	.....	
2	2	4	8	.....	....	10	10	.....	.. ..	
5	5	8	6	.....	.....	20	22	.....	.....	
12	15	10	7	1	2	21	20	....	....	
3	1	2	....	....	....	6	6	....	.....	
20	12	9	9	. ...	. .	50	48	1	2	
8	6	6	6	1	3	12	13	. .	. .	
20	21	17	17	10	12	30	39	....	.....	
1	... .	1	.. .	.....	.....	4	7	.....	... .	
1	.....	....	2	2	.....	4	4	.....	.....	
2	2	2	3	4	4	22	22	.....	.....	
4	5	1	1	4	...	8	8	.	.....	
2	3	4	2	2	2	6	6	....	.....	
6	5	4	3	.....	.....	6	9	.....	.. .	
.....	. .	.....	. ..	.....	.....	1	1	.. ..	.....	
172	164	195	178	42	40	541	595	5	12	
10	15	12	15	5	6	42	49	2	3	
4	2	2	2	1	2	10	10	.....	2	
4	5	8	9	3	1	23	19	.....	1	
3	3	4	4	.....	. . ..	17	19	2	.....	
10	8	4	4	4	4	19	13	3	5	
4	3	5	4	3	3	16	15	1	2	
.....	....	2	4	1	.....	15	8	1	1	
12	15	10	14	10	10	30	34	1	1	
4	7	9	6	3	3	17	17	3	2	
3	1	2	2	1	1	10	9	1	1	
4	3	6	5	2	3	14	14	2	4	
58	62	64	69	33	33	213	207	16	22	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians;

PROVINCE OF BRITISH

Indians.	Census Return.	Religion. Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
KAMLOOPS-OKANAGAN AGENCY—*Con.*									
Brought forward	777	610			167				
Snakaim	40	40							
Khaap	23	23							
Nesikeep	12	12							
Spapium	84	34							
Skappa	18	18							
Nkatsam	87	87							
Yeut	44	44							
Nikaomin	49	49							
Shhahanik	81	81							
Nkumcheen	81	81							
Spatsim	135	135							
Stlahl	60	60							
Tluhtaus	159				159				
Skichistan	112				112				
Kamloops	243				243				
Chuckchuqualk	122				122				
Halaut	149				149				
Haltham	181				181				
Kuant	82				82				
Spallamcheen	132				132				
Nkamaplix	175				174				1
Penticton	142				142				
N-Kamip	63				63				
Shennoquankin	73				73				
Ashnola	54				54				
Chuchunayha	52				52				
Spahamin	185				185				
Quinshaatin	111	7			104				
Quinskanht	52	48			4				
Naaik	141	115			26				
Nzyshat	21	11			10				
Zoht	31	31							
Duck Lake	24				24				
Okanagan Lake (Helowna)	37				37				
Hamilton Creek	38	30			8				
Total	3,820	1,516			2,303				1
KWAWKEWLTH AGENCY.									
Ahwhamish	63	63							
Koskimo	88								88
Klawitsis	67								67
Kwatsino	24								24
Kwawshela	48								48
Kwawkewlth	97	97							
Kwiahkah	42	42							
Mahtilpi	58	58							
Mamalillikulla	114	114							
Nahwahta	104								104
Nimkish	151	151							
Nuwitti	67								67
Tawaktenk	131								131
Tsawawtieneuk	223	223							
Wawlitsum, Wi-waiaikum, Wi-waiaikai } Lienkwiltak	53								53
	69				69				
	105			105					
Total	1,504	748		105	69				582

Denominations to which they belong, &c.—*Concluded.*

COLUMBIA.—*Concluded.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
58	62	64	69	33	33	213	207	16	22	
5	3	3	3	2	2	9	7	3	3	
2	2	1	1	1	2	8	4	1	1	
....	.....	1	.....	1	.....	4	4	1	1	
2	3	1	5	....	9	5	8	1	.....	
1	1	1	2	.....	1	5	6	1	.....	
7	7	3	6	1	....	31	31	....	1	
4	3	5	5	2	2	11	12	....	.....	
4	5	3	6	1	2	14	14	....	....	
6	5	5	6	5	4	20	18	3	9	
6	5	4	6	2	3	25	30	....	.....	
9	10	10	10	3	4	35	46	2	6	
5	4	4	4	3	2	17	17	2	2	
15	14	14	12	5	6	42	45	2	4	
10	10	15	10	5	5	23	27	2	5	
29	24	15	13	12	10	69	67	2	2	
10	9	10	10	8	7	34	30	2	2	
13	11	10	12	4	4	49	37	2	7	
12	15	18	20	7	5	54	50	.....	....	
9	8	8	9	2	2	20	20	1	3	
14	15	13	10	8	7	31	30	2	2	
8	7	12	9	7	5	52	62	8	5	
16	17	18	14	9	5	31	30	1	1	
2	5	5	5	3	2	19	20	1	1	
8	8	5	5	4	2	18	17	5	1	
4	4	4	3	3	3	15	17	1	.....	
5	4	4	4	1	3	12	14	2	3	
18	13	15	11	9	7	48	48	7	9	
10	9	10	9	2	3	25	22	6	15	
2	3	4	4	4	2	16	16	.. ..	1	
9	7	9	8	8	4	44	44	3	5	
4	3	2	1	1	.....	5	3	1	1	
4	4	4	2	1	1	7	6	1	1	
2	1	2	3	1	.....	7	7	1	.. ...	
4	4	2	3	1	1	9	10	2	1	
4	4	4	2	1	....	11	7	3	2	
321	309	308	302	160	148	1,038	1,033	85	116	
4	6	6	3	4	.....	19	21	.....	.....	
.....	.....	1	2	1	. ...	39	42	1	2	
4	2	3	5	2	1	25	25	.....	.....	
.....	....	.....	1	.....	1	9	13	.....	....	
3	4	5	3	5	4	12	12	.....	.. ..	
10	7	12	5	2	3	29	28	1	.....	
2	1	5	1	1	1	15	15	1	.. ...	
5	6	2	3	2	1	20	18	1	.....	
5	8	4	3	2	2	52	36	1	1	
9	9	8	5	6	7	32	28	.....	.....	
11	16	5	14	1	1	52	51	.....	...	
5	3	2	2	5	1	24	25	.....	.. .	
13	12	5	4	6	5	47	38	1	.. .	
18	17	25	19	4	3	72	63	1	1	
4	3	3	7	...	1	18	17	.....	.....	
7	2	3	2	1	1	27	26	.. ...	.....	
12	4	13	5	1	8	33	29	.....	..	
112	100	102	84	43	40	525	487	7	4	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians;

PROVINCE OF

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
CHIPPEWAS AND CREES OF TREATY NO. 1 AT—									
Rosean river, including Rapids	244				90				154
Long Plain	126								126
Swan Lake and Indian Gardens at Hamilton's Crossing	96								96
St. Peter's	1,087	897			102	62		12	14
Brokenhead River	177	122			26				29
Fort Alexander	494	241			239				14
Sandy Bay	267	26			235				6
Total, Treaty No. 1	2,491	1,286			692	62		12	439
Sioux at Portage la Prairie	138		95						43
CHIPPEWAS AND CREES OF TREATY NO. 2 AT—									
Lake Manitoba	104	21			77				6
Ebb and Flow Lake	65	8			46				11
Fairford	192	153				38			1
Little Saskatchewan	112	82				30			
Lake St. Martin	132	82				22			28
Crane River	53	11			7				35
Waterhen River	143				143				
Total, Treaty No. 2	801	357			273	90			81
CHIPPEWAS, SAULTEAUX AND CREES OF TREATY NO. 3—									
Buffalo Bay	33								33
Total, Treaty No. 3	33								33
CHIPPEWAS, SAULTEAUX AND CREES OF TREATY NO. 5—									
Black River	66	66							
Hollowwater River	104	47			14				43
Loon Straits, Blood Vein River	60								60
Fisher River	369			369					
Jackhead River	78	78							
Berens River	302			277	25				
Poplar River	143			143					
Norway House	574			574					
Cross Lake	310			310					
Grand Rapids, (Berens River)	125								125
Pekangekum	107								107
Grand Rapids (Crees and Saulteaux)	110	110							
Chemawawin (Crees)	155	154							1
Moose Lake (Crees and Saulteaux)	124	124							
The Pas	413	383			11			19	
Shoal Lake (Crees)	62	62							
Red Earth "	121	51							70
Cumberland "	154	148			6				
Total, Treaty No. 5	3,377	1,223		1,673	56			19	406

SESSIONAL PAPER No. 27

Denominations to which they belong, &c.—*Continued.*

MANITOBA.

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclulive.		From 65 years, upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
20	23	27	20	13	9	58	65	3	6	
7	8	10	9	4	3	36	46	.....	3	
4	4	10	11	4	3	27	32	1	.. ..	
107	108	112	95	47	56	268	260	14	20	
15	11	13	14	9	6	52	54	1	2	
62	45	48	40	19	21	127	126	.....	6	
21	20	45	42	19	20	45	41	6	8	
236	219	265	231	115	118	613	624	25	45	
20	9	19	17	7	3	27	28	3	5	
4	7	18	15	9	4	24	23	.....	.....	
6	4	7	6	1	.....	17	21	1	2	
18	17	18	18	10	11	48	43	5	4	
9	10	12	8	7	3	28	29	2	4	
16	10	16	13	8	3	29	28	4	5	
9	2	7	2	4	4	10	14	1	.....	
21	18	13	16	5	9	32	29	....	.....	
83	68	91	78	44	34	188	187	13	15	
1	1	1	1	3	5	10	8	.....	3	
1	1	1	1	3	5	10	8	.....	3	
3	7	5	5	9	3	8	12	7	7	
14	14	11	5	4	6	19	22	4	5	
6	2	9	5	5	3	10	16	.....	4	
28	42	30	31	30	22	85	92	3	6	
6	9	10	6	6	5	13	17	3	3	
30	34	38	45	29	10	49	59	7	1	
20	11	22	8	12	12	22	30	2	4	
58	62	55	65	40	30	94	140	17	13	
32	38	29	33	18	14	61	71	4	10	
12	9	21	8	12	5	24	27	2	5	
7	10	12	7	13	13	20	25	.. .	.....	
8	11	16	12	11	7	19	26	.....	.....	
13	16	18	12	15	6	31	40	1	3	
11	15	13	12	3	4	29	32	1	4	
45	44	49	48	18	15	82	98	6	8	
8	2	9	9	4	5	12	10	2	1	
14	15	17	14	5	3	24	22	3	4	
17	13	20	12	5	5	35	38	1	8	
332	354	384	337	239	168	637	777	63	86	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians ;

NORTHWEST

Indians.	Census Return.	Religion.							
		Anglican.	Presybterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Treaty No. 4.									
BIRTLE AGENCY.									
Keeseekoowenin	126	.....	91	.....	35	.....	.....	.....	.....
Waywayseecappo	164	.....	59	.....	31	.....	.....	.....	74
Valley River	73	.....	30	.....	31	.....	.....	.....	12
Gambler	14	.....	.....	.....	14	.....	.....	.....	.....
Rolling River	98	.....	16	.....	4	.....	.....	.....	78
Birdtail (Sioux)	62	.....	55	.....	.....	.....	.....	.....	7
Oak River "	310	75	7	.....	.....	.....	.....	.....	228
Oak Lake "	67	.....	27	.....	.....	.....	.....	.....	40
Turtle Mountain (Sioux)	10	.....	.....	.....	.....	.....	.....	.....	10
Total	924	75	285	.....	115	.....	.....	.....	449
PELLY AGENCY (LATE SWAN RIVER AGENCY).									
Coté	259	1	172	.....	20	.....	.....	.....	.....
Keys	218	146	1	.....	11	.....	.....	.....	.....
Keeseekouse	150	22	15	.....	64	.....	.....	.....	.....
Total	627	169	188	.....	95	.....	.....	.....	.....
MOOSE MOUNTAIN AGENCY.									
Pheasant Rump	39	.....	.....	.....	3	.....	.....	.....	36
Striped Blanket	36	.....	.....	.....	2	.....	.....	.....	34
White Bear	119	.....	1	.....	9	.....	.....	.....	109
Total	194	.....	1	.....	14	.....	.....	.....	179
CROOKED LAKE AGENCY.									
Ochapowace	108	2	7	.....	20	.....	.....	.....	79
Kahkewistahaw	110	5	16	.....	20	.....	.....	.....	69
Cowesess	155	1	16	.....	132	.....	.....	.....	6
Sakimay	204	4	6	.....	9	.....	.....	.....	185
Leech Lake (Little Bones)	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	577	12	45	.....	181	.....	.....	.....	339
ASSINIBOINE AGENCY.									
Carry-the-Kettle	211	.....	32	.....	22	.....	.....	.....	157
QU'APPELLE AGENCY.									
Little Black Bear	65	.....	3	.....	32	.....	.....	.....	30
Star Blanket	38	.....	.....	.....	3	.....	.....	.....	35
Okanase	67	.....	8	.....	8	.....	.....	.....	51
Peepeekeesis	64	.....	4	.....	24	.....	.....	.....	36
Piapot	156	.....	33	.....	42	.....	.....	.....	81
Pasquah	134	.....	32	.....	96	.....	.....	.....	6
Muskowpetung	82	.....	23	.....	18	.....	.....	.....	41
Standing Buffalo (Sioux)	172	.....	.....	.....	163	.....	.....	.....	9
Total	778	.....	103	.....	386	.....	.....	.....	289

Denominations to which they belong, &c.—*Continued.*

TERRITORIES.

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
12	14	15	13	5	8	21	34	2	2	
18	14	15	18	4	8	35	40	6	6	
7	11	5	7	3	6	14	17	1	2	
.....	2	2	.....	.....	.....	4	6	.....	.....	
10	6	8	5	6	4	27	28	3	1	
4	6	5	9	.....	2	14	21	1	.....	
34	42	27	24	16	9	65	74	11	8	
6	9	6	8	.....	1	13	15	5	4	
1	...	2	1	.....	.....	2	2	1	1	
92	104	85	85	34	38	195	237	30	24	
28	32	41	27	12	13	47	51	3	5	
25	23	25	35	8	6	40	47	4	5	
20	21	11	7	9	8	28	38	3	5	
73	76	77	69	29	27	115	136	10	15	
2	4	2	3	.....	2	12	13	1	.....	
5	1	2	1	3	1	11	12	.....	.....	
12	13	12	11	6	.....	28	37	.....	.....	
19	18	16	15	9	3	51	62	1	.....	
16	6	6	7	1	3	31	36	.....	2	
7	13	11	7	6	3	27	29	3	4	
21	13	10	20	3	7	32	47	...	2	
26	29	20	13	11	5	41	53	4	2	
.....	.....	.....	..	..	.....	.....	.	.....	.....	Unoccupied.
70	61	47	47	21	18	131	165	7	10	
14	18	15	10	19	18	45	53	9	10	
5	7	4	7	1	2	18	18	1	2	
5	2	3	4	.....	2	9	11	1	1	
3	8	10	8	4	.....	14	18	...	2	
4	3	3	12	2	3	15	20	.....	2	
11	6	23	17	11	10	31	39	2	6	
5	7	11	15	11	23	23	33	2	4	
8	7	4	8	3	4	13	27	7	1	
16	19	15	12	3	6	45	56	.....	...	
57	59	73	83	35	50	168	222	13	18	

CENSUS RETURN of Resident and Nomadic Indians;

NORTHWEST

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Treaty No. 4—Concluded.									
TOUCHWOOD HILLS AGENCY.									
Muscowequan	141				79				62
George Gordon	165	130			20				15
Day Star	75				1				74
Poor Man	94				4				90
Yellow Quill	375				1				374
Total	850	130			105				615
Pine Creek	94				92				2
Total, Treaty No. 4	4,255	386	654		1,010				2,205
Treaty No. 6.									
DUCK LAKE AGENCY.									
One Arrow	92				62				30
Okemassis	28	3			25				
Beardy	137	4	11		81				41
John Smith	131	128			3				
James Smith	109	101			1				7
Cumberland	125	108			2				15
Checastapasin									
Total	622	344	11		174				93
CARLTON AGENCY.									
William Twatt	146	17	7		2				120
Petequakey	83	2	3		78				
Mistawasis	126	6	84		36				
Ahtahkakoop	203	181	3		11				8
Kapahawekenum	72	6			51				15
Kenemotayoo	103	52			22				29
Pelican Lake Indians	52	6			1				45
Pelican Narrows	338	120			218				
Wahspaton (Sioux, non-treaty)	103		33						70
James Robert (Lac la Ronge)	451	433			18				
William Charles (Montreal Lake)	165	162			3				
Total	1,842	985	130		440				287
HOBBEMA AGENCY.									
Ermineskin	162			1	161				
Samson	337			223	83				31
Louis Bull	71			53	12				6
Montana (Little Bear)	47			17	1				29
Sharp Head (Cheepoostequan)									
Total	617			294	257				66

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Denominations to which they belong, &c.—*Continued.*

TERRITORIES—*Continued.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
14	15	13	6	9	13	33	31	2	5	
19	18	20	19	12	6	33	34	1	3	
8	11	7	8	1	.....	15	16	3	6	
10	13	3	6	2	4	24	24	3	5	
40	34	35	39	34	22	56	77	15	23	
91	91	78	78	58	45	161	182	24	42	
6	11	19	11	4	3	15	21	1	3	
422	438	410	398	209	202	881	1,078	95	122	
8	5	20	10	2	8	12	22	2	3	
4	4	1	2	. . .	1	7	9	.....	....	
13	18	12	17	2	9	30	31	3	2	
13	13	20	15	3	10	32	22	2	1	
13	14	13	10	7	8	21	20	3	.....	
11	16	13	12	6	8	26	27	3	3	Reserve
62	70	79	66	20	44	128	131	13	9	
16	10	21	10	9	11	33	31	1	4	
8	8	6	11	5	3	18	19	3	2	
10	7	14	6	9	10	31	36	1	2	
24	15	24	25	8	14	36	44	6	7	
4	5	8	11	2	6	16	15	1	4	
11	9	11	16	9	6	18	18	1	4	
4	7	4	8	3	2	7	12	3	2	
50	37	33	56	12	8	67	72	1	2	
1	2	14	16	10	12	21	24	2	1	
61	57	59	58	12	17	77	102	3	5	
24	21	18	15	10	9	31	35	1	1	
213	178	212	232	89	98	355	408	23	34	
12	21	13	15	7	3	41	48	.....	2	
33	42	41	36	8	7	76	88	4	2	
7	11	9	4	1	3	16	17	1	2	
4	4	10	4	1	.	11	11	1	1	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
56	78	73	59	17	13	144	164	6	7	

1-2 EDWARD VII., A. 1902

CENSUS RETURN of Resident and Nomadic Indians;

NORTHWEST

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Treaty No. 6—Concluded.									
BATTLEFORD AGENCY.									
Mosquito, Bear's Head, Lean Man } Stony	90	3			1				86
Red Pheasant	152	109			33				10
Sweet Grass	97	34			45				18
Poundmaker	108	3			99				6
Little Pine and Lucky Man	99	35			37				27
Moosomin	101	17			29				55
Thunderchild	145	49			56				40
Total	792	250			300				242
ONION LAKE AGENCY.									
Seekaskootch	250	35			125				90
Sweet Grass (attached)	19	19							
Weemisticooseahwasis	108	16			84				8
Ooneepowhayo	86	23			53				10
Puskeeahkeewein	27	4			23				
Keeheewin	119	2			117				
Kinoosayo (Chipewyan)	249				249				
Total	858	99			651				108
EDMONTON AGENCY.									
Enoch	122			10	112				
Michel	86				86				
Alexander	187				187				
Joseph	136				136				
Paul (White Whale Lake)	147			134	13				
Orphans at St. Albert	6				6				
Total	684			144	540				
SADDLE LAKE AGENCY.									
Saddle Lake	128			101	27				
Blue Quill	109			7	102				
James Seenum	320			250	70				
Lac la Biche	16				16				
Chipewyan	69				69				
Beaver Lake	102				102				
Total	744			358	386				
Total, Treaty No. 6	6,159	1,678	141	796	2,748				796
Treaty No. 7.									
BLACKFOOT AGENCY.									
Running Rabbit (Farm 20A)	482	32			42				408
White Pup (Farm 20B)	493	58			10				425
Total	975	90			52				833

Denominations to which they belong, &c.—*Continued.*

TERRITORIES—*Continued.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 66 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
6	7	8	4	7	1	24	25	.....	8	
12	15	17	20	9	2	36	37	2	2	
9	6	9	7	6	3	20	27	4	6	
12	7	13	11	3	3	31	25	1	2	
7	5	10	7	10	4	25	21	5	5	
7	9	13	9	9	7	21	21	2	3	
14	17	7	10	14	10	36	29	4	4	
67	66	77	68	58	30	193	185	18	30	
22	22	26	31	9	8	58	56	3	15	
3	.....	2	.....	1	.....	4	6	1	2	
7	10	10	17	3	4	23	26	2	6	
9	5	4	6	8	3	20	26	4	1	
1	2	2	7	1	.....	3	8	1	2	
15	10	13	12	6	..	27	25	2	9	
35	32	17	17	10	9	53	67	2	7	
92	81	74	90	38	24	188	214	15	42	
6	11	9	12	8	5	33	34	2	2	
14	12	7	10	10	7	10	14	2	.....	
12	19	19	15	8	7	48	57	1	1	
19	16	12	13	8	5	25	36	1	1	
21	18	23	13	6	2	25	38	1	....	
.....	.....	.....	.....	3	3	....	.....	.....	.....	
72	76	70	63	43	29	141	179	7	4	
12	15	19	11	10	3	25	29	2	2	
16	22	11	6	5	2	21	25	1	.....	
61	32	28	31	10	19	59	74	4	2	
2	.....	2	2	1	1	2	6		.....	
8	13	9	7	4	.. .	10	16	1	1	
17	16	8	6	2	7	20	24	1	1	
116	98	77	63	32	32	137	174	9	6	
678	647	662	641	297	270	1,286	1,455	91	132	
25	32	68	37	20	29	126	106	12	27	
33	35	65	42	21	10	124	136	12	15	
58	67	133	79	41	39	250	242	24	42	

CENSUS RETURN of Resident and Nomadic Indians;

NORTHWEST

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Treaty No. 7—Concluded.									
SARCEE AGENCY.									
Bull Head	205	25			8				172
Stony Reserve	637			637					
Total	842	25		637	8				172
BLOOD AGENCY.									
Bloods	1,279	125			102				1,052
PEIGAN AGENCY.									
Peigans	537	56			100				381
Total, Treaty No. 7	3,633	296		637	262				2,438
Treaty No. 8.									
Crees and Chipewyans at Fort McMurray	152								
Chipewyans at Fond du Lac	349								
Beavers at Dunvegan	145								
Crees at Little Red River	36								
Chipewyans at Fort Chipewyan	397								
Crees at Fort Chipewyan	197								
Chipewyans at Smith Landing	273								
Crees at Wabiscow	250								
Crees at Peace River Landing	56								
Beavers at Vermilion, Peace River	131								
Crees at Vermilion, Peace River	103								
Crees at Lesser Slave Lake	289								
Crees at Sturgeon Lake	128								
Beavers at Fort St. John	52								
Stragglers at Fort McMurray	31								
Crees at Whitefish Lake	54								
Slaves of Upper Hay River	218								
Slaves of Lower Hay River	114								
Chipewyans at Fort Resolution	126								
Yellowknives of Fort Resolution	260								
Dogribs of Fort Resolution	213								
Crees of Trout Lake	1								
Total	3,575								
UPPER MACKENZIE DISTRICT.									
Rampart House	400	400							
EASTERN ATHABASCA DISTRICT.									
Green Lake	46				14				32
Isle à la Crosse	500				500				
Portage la Loche	220				220				
Waterhen Lake	115				4				111
Total	881				738				143

Denominations to which they belong, &c.—*Continued.*

TERRITORIES—*Continued.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
11	11	13	12	7	9	52	69	10	11	
56	52	43	46	61	54	141	177	4	3	
67	63	56	58	68	63	193	246	14	14	
134	103	95	73	80	65	276	389	27	37	
55	68	47	49	24	16	122	140	5	11	
314	301	331	259	213	183	841	1,017	70	104	
...	...	...	...	...	...	...	...	...	...	Religious belief not given ; no details ; no agent.
...	...	...	...	...	...	...	...	...	...	Ages not given ; no agent.
...	...	...	...	...	...	...	...	...	...	" "

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CENSUS RETURN of Resident and Nomadic Indians ;

NORTHWEST

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
LOWER MACKENZIE DISTRICT.									
Peel River	685	430	.....	.....	255	.....	.....	.....	.....
Fort Good Hope	570	.....	.....	.....	570	.....	.....	.....	.....
Fort Norman	324	80	.....	.....	244	.....	.....	.....	.....
Fort Wrigley	280	90	.....	.....	190	.....	.....	.....	.....
Fort Simpson	199	100	.....	.....	99	.....	.....	.....	.....
Total	2,058	700	.....	.....	1,358	.....	.....	.....	.....
GREAT SLAVE LAKE DISTRICT.									
Providence	582	100	.....	.....	482	.....	.....	.....	.....
Fort Rae	800	.....	.....	.....	800	.....	.....	.....	.....
Total	1,382	100	.....	.....	1,282	.....	.....	.....	.....
RIVIÈRE AUX LIARDS DISTRICT.									
Fort Liard	205	.....	.....	.....	205	.....	.....	.....	.....
Fort Nelson	172	.....	.....	.....	172	.....	.....	.....	.....
Total	377	.....	.....	.....	377	.....	.....	.....	.....
YUKON DISTRICT.									
Forty Mile Creek	2,600	400	.....	.....	.....	.....	.....	.....	2,000
Selkirk or Pelly Creek	.....	200	.....	.....	.....	.....	.....	.....	
Total	2,600	600	.....	.....	.....	.....	.....	.....	2,000
NELSON AND CHURCHILL RIVERS DISTRICT.									
Pelican Narrows	211	.....	.....	.....	211	.....	.....	.....	.....
Nelson River	115	.....	.....	.....	115	.....	.....	.....	.....
Churchill	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lac Caribou	525	.....	.....	.....	525	.....	.....	.....	.....
Esquimaux	1	.....	.....	.....	1	.....	.....	.....	.....
Total	852	.....	.....	.....	852	.....	.....	.....	.....

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Denominations to which they belong, &c.—*Continued.*

TERRITORIES—*Concluded.*

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ages not given ; no agent.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	" "
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No return received.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ages not given ; no agent.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

CENSUS RETURN of Resident and Nomadic Indians;

RECAPITU

PROVINCE OF

Indians.	Census Return.	Religion.							
		Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
West Coast Agency	2,480	.....	375	178	961	...	.....	....	966
Fraser River	2,859	73	...	159	2,574	....	.....	.....	53
Babine and Upper Skeena River Agency	2,809	626	.....	237	1,752	.. ..	..	107	87
Williams Lake Agency	1,971	19	.....	.....	1,952	.....	.....	.. ..	.....
Northwest Coast "	4,141	1,193	.....	2,302	.....	.....	.....	.....	646
Kootenay "	548	....	.....	....	548	.....	.....	.....	.....
Cowichan "	1,944	.....	60	352	1,468	.....	.....	8	56
Kamloops-Okanagan Agency	3,820	1,516	....	...	2,303	....	.....	.....	1
Kwawkewlth "	1,504	748	... ..	105	69	. ....	....	. ....	582
Bands not visited, about	2,500	.....	....	.....	.....	.....	...	.. ..	.....
Grand total	24,576	4,175	435	3,333	11,627	.....	.....	115	2,391

PROVINCE OF

Treaty No. 1	2,491	1,286	.....	.....	692	62	.....	12	439
" 2	801	357	....	.....	273	90	.....	.....	81
" 3	33	...	.....	...	.....	.....	.....	.. ..	33
" 5	3,377	1,223	.....	1,673	56	.....	.....	9	406
Sioux at Portage la Prairie	138	.....	95	....	.....	.....	.....	.....	43
Grand total	6,840	2,866	95	1,673	1,021	152	.....	31	1,002

NORTHWEST

Treaty No. 4	4,255	386	654	.....	1,010	.....	.....	.....	2,205
" 6	6,159	1,678	141	796	2,748	....	....	.....	796
" 7	3,633	296	.....	637	262	.....	....	.....	2,438
" 8	3,575	..	.....	.....	.....	.....	.. ..	.....	.....
Non-treaty Indians	305	....	.....	44	....	.....	.....	.....	261
Grand total	17,927	2,360	795	1,477	4,020	.....	....	.....	5,700

Ungava	4,016	....	.....	.. ...	.....	....	.....	.....	.....
Labrador, Canadian Interior	1,000	.....	.....	.....	..	..	.....	.....	.....
Arctic Coast, Esquimaux	1,000	.... .	...	.....	.....	...	.....	. ....	.....

Denominations to which they belong, &c.—*Continued.*

LATION.

BRITISH COLUMBIA.

Under 6 Years.		From 6 to 15, Inclusive.		From 16 to 20, Inclusive.		From 21 to 65, Inclusive.		From 65 Years Upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
163	155	207	198	82	72	707	742	82	72	
282	280	236	237	104	101	698	698	120	103	
151	146	224	260	149	152	783	787	85	72	
212	193	88	83	158	169	457	460	78	73	
324	323	323	315	248	234	1,099	1,085	91	99	
47	52	57	48	16	24	134	143	17	10	
172	164	195	178	42	40	541	595	5	12	
321	309	308	302	160	148	1,038	1,033	85	116	
112	100	102	84	43	40	525	487	7	4	Religion unknown; no agent; no details.
1,784	1,722	1,740	1,705	1,002	980	5,982	6,030	570	561	

MANITOBA.

236	219	265	231	115	118	613	624	25	45	
83	68	91	78	44	34	188	187	13	15	
1	1	1	1	3	5	10	8	. .	3	
332	354	384	337	239	168	637	777	63	86	
20	9	19	17	7	3	27	28	3	5	
672	615	760	664	408	328	1,475	1,624	104	154	

TERRITORIES.

422	438	410	398	209	202	881	1,078	95	122	
678	647	662	641	297	270	1,286	1,455	91	132	
314	301	331	259	213	183	841	1,017	70	104	
.....	.....	.....	.....	.....	.....	.....	...	.	.....	Religious belief unknown; no agent; no details.
.....	.. ..	. ..	....	....	....	.....	.....	.....	.... .	
1,414	1,386	1,403	1,298	719	655	3,008	3,550	256	358	

.....	.....	. ....	....	.....	...	.....	.....	.....	.....	Religion unknown; no details.
. ...	....	.....	.....	....	.....	....	.....	.....	.....	" "
.....	.....	.....	.....	....	.....	....	.....	.... .	.....	" "

CENSUS RETURN of Resident and Nomadic Indians ;

GRAND

Provinces, &c.	Census Return.	RELIGION. Anglican.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Other Christian Beliefs.	Pagan.
Ontario	20,763	5,157	147	4,251	6,512	810	85	358	3,151
Quebec	10,865	87	3	437	7,573	1	4	33	2
Nova Scotia	2,020				2,020				
New Brunswick	1,655				1,655				
Prince Edward Island	315				315				
British Columbia	24,576	4,175	435	3,333	11,627			115	2,391
Manitoba	6,840	2,866	95	1,673	1,021	152		31	1,002
Northwest Territories	17,927	2,360	795	1,477	4,020				5,700
Upper McKenzie District	400	400							
Eastern Athabasca "	881				738				143
Lower McKenzie "	2,058	700			1,358				
Great Slave Lake "	1,382	100			1,282				
Rivière Aux Liards "	377				377				
Yukon "	2,600	600							2,000
Nelson and Churchill Rivers District	852				852				
Ungava	4,016								
Labrador, Canadian Interior	1,000								
Arctic Coast, Esquimaux	1,000								
Grand total	99,527	16,445	1,475	11,171	39,350	963	89	537	14,389

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Denominations to which they belong, &c.—*Concluded.*

RECAPITULATION.

Under 6 years.		From 6 to 15 yrs., inclusive.		From 16 to 20 yrs., inclusive.		From 21 to 65 yrs., inclusive.		From 65 years upwards.		Remarks.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1,500	1,646	2,170	2,087	1,217	1,083	4,882	5,043	392	451	
711	734	890	771	469	470	1,763	1,659	150	175	
153	147	226	234	171	171	400	394	66	50	
129	138	185	173	73	64	411	393	40	49	
42	53	31	25	20	13	64	53	7	7	
1,784	1,722	1,740	1,705	1,002	980	5,982	6,030	570	561	
672	651	760	664	408	328	1,475	1,624	104	154	
1,414	1,386	1,403	1,298	719	655	3,008	3,550	256	358	
.....	.....	.....	.....	.....	.....	.....	.....	.....	...	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No details.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Religion unknown. No details.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
6,405	6,477	7,405	6,957	4,079	3,764	17,985	18,746	1,585	1,805	

REALTY OF INDIANS.

Agency.	Land.		Public Buildings, Property of Band.						Private Fencing and Buildings.				
	Cleared, including natural pasturage.	Cultivated, including made pasturage.	Churches.	Council Houses.	School Houses.	Driving Sheds.	Other Buildings.	Ferries.	Acres Fenced.	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.
Ontario.	Acres.	Acres.											
Grand River Superintendency—Six Nations	23,974	10,722	14	1	11	7	1	.....	41,696	1	15	201	365
Parry Sound Superintendency	1,476	.....	7	....	6	1	5	.....	1,456	....	.....	23	119
New Credit (Mississaguas) Agency	1,010	2,950	2	1	1	3	3	.....	5,100	....	3	45	20
Walpole Island Agency	8,200	2,991	2	1	3	2	2	4	2,991	....	.....	101	131
Sarnia "	3,612	680	4	2	3	1	1	.....	5,472	.....	2	111	8
Caradoc "	7,669	6,434	.....	3	6	1	13	.....	15,420	....	6	107	138
Moravian "	1,200	960	.....	1	1	.....	.....	.....	2,240	....	1	28	57
Manitowaning "	1,517	3,864	7	3	9	2	.....	.....	2,216	....	.....	27	280
Gore Bay "	3,859	1,390	3	.....	2	.....	2	.....	1,329	....	.....	7	99
Thessalon "	350	260	2	.....	4	.....	.....	.....	260	....	.....	28	57
*Sault Ste. Marie "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Arthur "	786	543	3	2	6	1	2	.....	325	....	.....	20	186
Golden Lake "	185	25	1	.....	1	....	1	.....	82	....	.....	.....	15
Tyendinaga "	1,538	15,162	3	1	4	3	1	.....	15,600	....	3	128	33
Lake Simcoe "	200	537	1	1	1	1	1	.....	537	....	.....	13	19
Cape Croker "	3,500	1,500	2	1	3	2	5	.....	700	1	.....	40	60
Saugeen "	1,065	1,035	4	1	3	3	9	.....	865	....	1	60	45
Alnwick "	.....	2,543	1	1	1	1	4	.....	2,473	....	.....	48	9
Mud Lake "	250	250	1	.....	1	.....	5	.....	300	....	1	22	12
Rice Lake "	775	575	1	1	1	1	.....	.....	755	....	.....	11	14
Rama "	385	750	1	1	1	2	2	.....	931	....	.....	48	30
Christian Island "	1,000	625	2	1	1	.....	.....	.....	625	....	.....	4	41
Scugog "	20	740	1	.....	.....	.....	.....	.....	800	....	.....	5	3
Indians of Christian Island Band residing on Manitoulin Island	.....	.....	.....	.....	.....	.....	.....	.....	20	....	.....	.....	8
Rat Portage Agency	1,045	125	.....	.....	4	.....	.....	.....	.....	....	.....	.....	146
Couchiching "	214	128	.....	....	5	....	1	.....	176	....	.....	3	113
Savanne "	9,630½	117½	.....	....	7	.....	.....	.....	22½	....	.....	.....	172
Total	73,460½	54,906½	62	22	85	31	58	4	102,391½	2	32	1,080	2,180

QUEBEC.													
Lake of Two Mountains Agency	260	1,640							1,015	2		72	8
Caughnawaga Agency	4,177	4,150	1	1	3		3		2,336	40	20	379	13
St. Regis "	2,662	2,950	2	1	4		11		925			144	56
Viger "													20
St. Francis "	127	369	3	1	2		2		80		1	75	
Lake St. John "	340	764	2		1		1		985			28	20
Maria "	46	130	1		1				130			17	3
Restigouche "	200	604	1	1	1				604			64	24
River Desert "	726	45			2	1			330				24
Jeune Lorette "	280	200	1		1				1,230	1	1	69	
Becancour "	4	65			1		1		40			5	
Temiscaming "	154	244			1				125			5	24
Bersimis "	365	45	4						16			52	38
Total	11,341	11,206	15	4	17	1	18		7,816	43	22	910	230

* No return received; new agent.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

REALTY OF INDIANS—*Concluded.*

Agency.	Private Buildings.									
	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	Root Houses.	Milk Houses.	Corn Cribs.
Ontario.										
Grand River Superintendency—										
Six Nations	27	136	355	78	179	175	61	43	113	61
Parry Sound Superintendency	18	42	49	...	38	2	20	.....	.....	8
New Credit (Mississaguas) Agency	6	34	26	2	5	15	1	4	16	2
Walpole Island Agency	.....	17	155	.....	45	.....	39	12	35	64
Sarnia "	6	31	77	7	22	39	25	12	18	28
Caradoc "	27	36	126	20	48	63	36	18	17	45
Moravian "	3	9	48	3	20	20	12	12	7	22
Manitowaning "	59	74	189	8	65	157	40	139	4	16
Gore Bay "	14	59	84	14	25	90	29	37	8	2
Thessalon "	23	10	32	.....	15	7	3	6	4	.....
*Sault Ste. Marie "	.....	...	.. .	.....	.....	....	.....	...	.....	.....
Port Arthur "	3	32	2	.....	20	.....	12	5	.....	.....
Golden Lake "	3	3	9	.....	11	...	.....	.....	2	.....
Tyendinaga "	.....	118	168	64	156	156	1	22	6	46
Lake Simcoe "	1	8	20	.....	14	13	1	5	4	.....
Cape Croker "	.....	50	56	1	30	30	1	3	5	.....
Saugeen "	.....	25	73	.....	20	30	2	5	.....	.....
Alnwick "	2	17	21	2	3	1	1	.....	1	.....
Mud Lake "	.....	12	10	1	11	4	.....	1	.....	.....
Rice Lake "	.....	10	10	.....	7	7	..	5	1	.....
Rama "	2	31	32	5	3	10	30	10	2	...
Christian Island "	2	10	31	6	20	20	3	10	10	12
Scugog "	1	6	7	.....	3	2	.....	2	....	.....
Indians of Christian Island Band residing on Manitoulin Island	.....	3	5	.....	2	1	. ..	5	....	....
Rat Portage Agency	...	....	39	.....	21	.....	....	...	.....	.....
Couchiching "	31	.....	27	.....	13	.....	....	.....	....	.....
Savanne "	.....	.....	2	.....	13	.....	.....	.....	.....	.....
Total	228	773	1,653	211	809	842	317	356	253	306

QUEBEC.											
Lake of Two Mountains Agency	....	27	54	16	7	24	23	....	14	4
Caughnawaga Agency	.....	111	296	.....	....	12	12	2	10	14
St. Regis "	.....	99	50	.....	44	44	2	1	.....	30
Viger "	....	....	....	.....	....	.....	.....	.....	.....	.....
St. Francis "	....	6	5	2	15	4	11	....	3	.....
Lake St. John "	3	22	.....	2	....	4	.....	5	10	.....
Maria "	...	14	6	8	19	16	4	4	6	.....
Restigouche "	6	60	34	.....	64	42	8	.....	12	.....
River Desert "	29	16	17	2	11	4	2	7	5	....
Jeune Lorette "	.....	10	8	.....	6	15	....	.....	....	.....
Becancour "	1	2	....	.....	2	2	.....	1	1	.....
Temiscaming "	14	11	10	.....	8	3	14	14	1	....
Bersimis "	5	....	2	....	4	.....	.....	1	.	.....
Total	58	378	482	30	180	170	76	35	62	48

* No return received ; new agent.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS.

Agency.	Agricultural Implements, Vehicles, &c.																
	Ploughs.	Harrows.	Seed Drills.	Cultivators.	Land Rollers.	Mowers.	Reapers.	Horse Rakes.	Fanning Mills.	Threshing Machines.	Tool Chests.	Other Implements.	Wagons.	Carts.	Sleighs, Draught.	Sleighs, Driving.
ONTARIO.																
Grand River Superintendency—																
Six Nations	379	266	58	198	77	124	75	115	159	2	95	2,715	283	102	225	97
Parry Sound Superintendency	38	26	....	.....	.....	2	1	.....	6	.....	....	635	11	1	31	12
New Credit (Mississaguas) Agency	48	43	10	15	7	12	10	11	14	1	1	120	30	..	25	10
Walpole Island Agency	103	58	7	62	6	33	6	22	30	1	3	128	125	4	50	24
Sarnia "	81	71	4	39	10	27	24	25	42	1	15	762	84	.....	62	13
Caradoc "	131	113	21	85	21	37	32	35	62	1	18	1,547	77	13	86	29
Moravian "	60	56	7	55	2	14	8	12	16	.....	2	360	42	.....	35	12
Manitowaning "	181	105	.....	5	.....	25	8	24	11	2	51	1,640	127	10	140	145
Gore Bay "	57	51	....	.....	.....	1	.....	4	9	.....	.....	.....	29	2	45	66
Thessalon "	20	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	393	2	3	9	29
*Sault Ste. Marie "	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
Port Arthur "	28	11	.....	....	....	1	....	.....	.....	.....	3	1,510	3	2	24	4
Golden Lake "	6	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	6	3
Tyendinaga "	127	130	25	92	37	60	34	70	54	3	42	4,208	117	.....	107	76
Lake Simcoe "	23	13	.....	1	.....	2	2	2	4	1	9	110	4	.....	8	12
Cape Croker "	50	40	2	3	2	8	1	20	25	1	1	500	40	3	25	20
Saugeen "	60	38	.....	.....	.....	6	2	10	5	....	50	1,500	30	.....	50	40
Alnwick "	26	24	6	10	4	5	4	8	12	.....	3	583	20	5	15	12
Mud Lake "	12	7	1	1	1	1	1	1	4	1	.....	100	4	1	8	3
Rice Lake "	9	6	1	1	1	1	2	2	5	.....	1	60	5	.....	5	2
Rama "	20	20	.....	.....	1	1	2	2	2	.....	4	125	8	.....	8	7
Christian Island "	40	30	4	6	5	3	1	3	3	1	5	100	17	1	15	5
Scugog "	4	3	2	.....	.....	1	2	1	4	.....	3	43	3	.....	3	3
Indians of Christian Island Band residing on Manitoulin Island.	4	3	.....	.....	.....	.....	.....	1	.....	.....	2	50	1	.....	3	3
Rat Portage Agency	11	8	....	.....	.....	...	.....	.....	.....	.....	.....	341	.....	.....	.....	.....

Couchiching "	23	15	.....	.....	.....	.....	.....	.....	1	.....	.....	323	.....	.....	2	5
Savanne "	15	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	496	.....	.....	.....	.....
Total	1,556	1,163	148	573	174	364	215	368	468	15	398	18,373	1,062	147	987	632
QUEBEC.																
Lake of Two Mountains Agency	34	30	.....	6	1	6	1	9	10	3	4	445	14	49	46	37
Caughnawaga Agency	245	200	15	30	8	30	8	35	20	16	75	550	140	185	200	50
St. Regis "	104	83	6	70	4	45	16	46	8	12	62	200	62	26	80	52
Viger "	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Francis "	3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	140	15	...	15	13
Lake St. John "	23	30	.....	.....	1	3	1	5	10	4	.....	.....	10	20	30	30
Maria "	3	7	.....	.....	1	.....	.....	.....	2	1	3	114	4	7	6	4
Restigouche "	33	24	.....	4	3	4	2	12	3	1	4	150	6	10	19	7
River Desert "	23	24	1	.....	3	1	1	4	4	.....	.....	316	7	12	25	5
Jeune Lorette "	5	5	.....	1	.....	..	.....	1	.....	.....	.....	280	4	7	10	5
Becancour "	3	3	.....	.....	.....	.....	1	1	.....	.....	.....	30	2	2	2	2
Temiscaming "	12	15	.....	.....	1	1	.	1	1	1	3	200	3	1	13	2
Bersimis "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4	2	...
Total	488	427	22	111	22	90	30	114	58	38	151	2,425	269	323	448	207

* No return received ; new agent.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS—*Continued.*

Agency.	Agricultural Implements, Vehicles, &c.—*Con.*		Value of Agricultural Implements and Vehicles.	Live Stock and Poultry.												
				Horses.			Cattle.					Other Stock.				
	Democrat Wagons.	Buggies and Road Carts.		Stallions and Geldings.	Mares.	Colts, Fillies and Foals.	Bulls.	Oxen, Work.	Steers.	Cows, Milch.	Young Stock.	Sheep.	Lambs.	Boars, Breeding.	Sows, Breeding.	Pigs.
			$ cts.													
Ontario.																
Grand River Superintendency—																
Six Nations	105	213	30,364 00	440	548	198	21	....	78	797	590	274	63	38	406	2,113
Parry Sound Superintendency	1	....	2,510 00	26	27	15	11	11	20	111	102	26	....	....	1	56
New Credit (Mississaguas) Agency	15	38	3,200 00	45	35	15	5	....	10	70	75	15	8	3	30	75
Walpole Island Agency	19	51	10,317 00	145	117	98	5	8	13	182	219	29	....	8	75	501
Sarnia "	9	81	13,548 00	91	74	10	9	..	40	93	72	....	....	....	11	192
Caradoc "	46	111	9,967 50	122	129	48	3	....	25	141	108	16	9	4	64	299
Moravian "	14	44	7,500 00	45	80	24	3	....	15	50	80	10	5	5	68	216
Manitowaning "	13	22	13,701 00	174	203	82	8	13	26	95	114	33	12	15	122	779
Gore Bay "	3	20	5,546 00	44	66	15	3	5	1	34	20	38	....	3	20	304
Thessalon "	....	....	797 00	41	25	7	....	2	10	21	19	....	....	....	6	42
*Sault Ste. Marie "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Port Arthur "	....	1	2,915 00	18	10	2	5	9	6	29	22	....	....	....	....	....
Golden Lake "	5	1	527 75	3	3	2	5	....	....	12	16	....	....	....	....	5
Tyendinaga "	70	70	29,846 88	202	120	56	31	....	91	478	400	75	70	5	200	300
Lake Simcoe "	2	2	1,013 00	6	18	2	2	....	13	22	29	7	4	1	10	56
Cape Crocker "	20	20	8,545 00	65	40	20	....	....	20	40	50	50	40	2	40	400
Saugeen "	25	65	5,447 00	25	70	45	....	....	15	39	36	....	....	....	75	150
Alnwick "	10	22	3,436 15	24	19	4	3	....	6	41	53	....	....	....	7	45
Mud Lake "	5	1	1,000 00	8	10	6	2	....	2	17	12	....	....	1	3	14
Rice Lake "	....	3	1,200 00	10	8	6	1	....	....	16	10	....	....	1	2	22
Rama "	2	10	1,200 00	4	13	3	....	....	3	8	12	....	....	....	5	60
Christian Island "	3	4	2,000 00	40	45	15	1	4	10	50	50	25	10	10	50	150
Scugog "	2	5	696 00	4	4	4	....	....	1	4	3	....	....	....	5	27
Indians of Christian Island Band residing on Manitoulin Island	....	....	250 00	5	3	....	....	....	....	2	....	....	....	....	3	16
Rat Portage Agency	....	....	389 25	55	19	2	7	18	10	17	21	....	....	....	....	....

Couchiching "			753 00	32	29		4	14	5	12	11					
Savanne "			496 50	6			6	1		8	22					
Total	369	784	157,166 03	1,680	1,715	679	135	85	420	2,389	2,146	598	221	96	1,203	5,822
QUEBEC.																
Lake of Two Mountains Agency	7	31	6,160 55	3	67	25	18		5	95	93	28	17		38	123
Caughnawaga Agency		80	9,847 00	6	80	75	25		15	360	225	10	8	2	20	110
St. Regis "	13	55	8,000 00	80	100	73	19			185	170			15	80	145
Viger "																
St. Francis "		9	1,500 00	5	8		2			34	25					43
Lake St. John "	19	5	3,917 00	13	20	5	3	4	25	63	46	15	28	3	11	40
Maria "			800 00		5	3	3		2	9	14	4	2		7	40
Restigouche "	4	8	4,400 00	14	20	7	4	3	5	39	76	25	18	4	11	54
River Desert "	4	10	2,676 00	28	11	3	3		6	46	26	23	9	3	9	21
Jeune Lorette "	1	5	350 00	1	5	1	2		3	18	6	2				30
Becancour "		3	300 00	1	2	1	1			7	6	2	3		2	8
Temiscaming "	1		1,189 00	6	5	2				12	12	4	4	2	2	3
Bersimis "		2	81 00	3			1			4	7					2
Total	49	208	39,220 55	160	323	195	81	7	61	872	706	73	89	29	180	619

* No return received ; new agent.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS—*Concluded.*

Agency.	Live Stock and Poultry—*Con.*				Value of Live Stock and Poultry.	General Effects.								Household Effects.	Value of Real and Personal Property.
	Poultry.														
	Turkeys.	Geese.	Ducks.	Cocks and Hens.		Sail Boats.	Row Boats.	Canoes.	Rifles.	Shot Guns.	Nets.	Steel Traps.	Tents.	Value of.	Value of.
ONTARIO.					$ cts.									$ cts.	$ cts.	$ cts.
Grand River Superintendency—Six Nations	914	145	885	10,398	52,780 00	.....	4	1	15	129	1	280	3	965 00	33,510 00	970,969 00
Parry Sound Superintendency	...	.....	.....	615	9,780 00	21	22	93	79	76	162	655	.....	4,857 00	15,900 00	167,796 00
New Credit (Mississaguas) Agency	200	60	175	700	9,000 00	.....	.....	....	5	25	3	20	1	125 00	6,600 00	210,125 00
Walpole Island Agency	250	155	160	1,500	19,132 00	10	28	15	12	30	2	550	4	700 00	14,500 00	292,606 00
Sarnia "	355	38	227	3,316	10,944 00	....	31	.....	9	21	8	14	.....	866 00	12,000 00	405,887 00
Caradoc "	170	41	64	7,592	12,651 50	.....	4	2	18	37	.....	166	.....	227 20	15,242 00	438,316 70
Moravian "	20	80	30	208	10,250 00	....	2	....	12	9	8	40	.....	220 00	32,000 00	151,395 00
Manitowaning "	...	..	.....	2,420	17,145 00	110	37	42	35	141	370	589	86	10,400 00	26,350 00	339,619 00
Gore Bay "	22	27	14	514	12,544 25	33	25	.....	7	66	81	177	9	5,130 65	9,750 00	151,068 92
Thessalon "	11	2	5	360	5,236 00	32	22	53	8	57	162	1,168	43	5,859 00	5,205 00	103,177 00
*Sault Ste. Marie "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Arthur "	.....	13	11	480	4,180 00	33	33	507	75	404	690	2,463	129	21,975 00	25,000 00	138,692 00
Golden Lake "	.....	.....	.....	10	878 00	....	.....	13	19	8	11	131	15	615 25	730 00	13,710 00
Tyendinaga "	499	160	388	8,206	51,163 00	4	37	.....	14	49	5	335	1	1,628 00	25,550 00	953,747 88
Lake Simcoe "	52	....	33	338	3,335 50	2	23	4	4	14	4	75	17	800 00	2,500 00	57,011 50
Cape Croker "	20	..	20	500	11,833 00	5	20	2	21	25	250	25	3	3,927 50	25,250 00	171,973 50
Saugeen "	75	30	54	250	6,233 50	4	7	...	50	100	25	110	5	1,160 00	6,000 00	97,335 50
Alnwick "	34	3	31	671	5,151 00	.....	1	18	10	9	...	540	22	763 00	4,336 15	121,493 30
Mud Lake "	.....	20	30	200	2,100 00	.....	.....	40	4	28	....	1,700	6	1,300 00	2,000 00	41,250 00
Rice Lake "	.....	10	40	200	2,000 00	.....	.....	13	1	7	.....	400	.....	1,000 00	1,500 00	51,450 00
Rama "	10	18	30	70	1,600 00	.....	8	60	23	14	.....	375	24	800 00	3,500 00	46,408 00
Christian Island "	10	20	.....	500	4,000 00	15	25	20	30	25	30	400	20	1,000 00	4,000 00	46,500 00
Scugog "	39	12	2	96	900 00	....	1	7	3	6	1	270	.....	40 00	810 00	40,146 00
Indians of Christain Island Band residing on Manitoulin Island	.....	.....	....	50	425 00	4	.....	.....	1	2	12	2	4	300 00	800 00	2,775 00
Rat Portage Agency	...	...	.....	.....	3,400 00	2	3	375	32	217	320	1,943	82	1,496 50	3,115 00	229,367 75

Couchiching "	....	....	.....	.....	3,175 00	.....	2	358	70	56	34	281	46	3,384 00	2,970 00	134,286 00
Savanne "	.....	.....	.....	.....	845 00	3	1	371	54	217	399	3,689	162	7,341 50	2,090 00	65,857 00
Total	2,681	834	2,199	39,194	260,681 75	278	336	1,994	611	1,772	2,578	16,398	682	76,880 60	281,208 15	5,443,963 05
QUEBEC.																
Lake of Two Mountains Agency..	4	.....	4	726	10,195 95	.....	24	2	8	26	16	149	3	480 15	4,035 50	75,005 65
Caughnawaga Agency	.....	....	15	200	17,319 00	.....	50	10	.....	.....	.....	.....	4	400 00	53,200 00	530,808 50
St. Regis "	350	40	80	1,350	19,164 00	.....	65	....	17	20	12	750	.....	950 00	15,000 00	353,660 00
Viger "	.	.....	....	.....	.....	.....	.....	7	...	14	...	241	.....	236 00	660 00	2,814 00
St. Francis "	....	.....	.....	107	1,943 80	....	8	7	2	23	....	527	10	850 00	8,000 00	78,894 80
Lake St. John "	.....	....	.....	150	5,364 00	.....	.....	150	175	250	100	5,500	200	22,300 00	6,000 00	94,863 50
Maria "	...	.....	.....	90	900 00	.....	.....	11	2	12	.....	50	....	400 00	1,800 00	16,580 00
Restigouche "	...	....	5	198	5,200 00	.....	4	46	20	6	.....	72	3	600 00	6,200 00	70,200 00
River Desert "	30	.....	.....	230	4,528 00	....	3	45	25	96	15	65	39	2,611 00	5,160 00	176,713 00
Jeune Lorette "	2	.....	10	200	1,500 00	.....	....	10	5	60	.....	500	10	1,400 00	8,550 00	85,000 00
Becancour "	...	.....	.....	75	350 00	.....	....	3	3	....	2	....	2	50 00	450 00	5,350 00
Temiscaming "	.....	.. ..	.....	249	1,713 00	...	1	15	18	19	32	540	23	1,364 55	3,784 00	49,958 80
Bersimis "	.....	.....	.....	10	345 00	42	.....	317	63	362	140	3,536	212	18,821 00	11,555 00	58,648 00
Total..	386	40	114	3,585	68,522 75	42	155	623	338	888	317	11,930	506	50,462 70	124,394 50	1,598,496 25

* No return received; new agent.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

AGRICULTURE, SEASON 1900.

Agency.	Grain, Roots and Fodder.															
	Wheat.		Oats.		Barley.		Corn.		Pease.		Rye.		Buckwheat		Beans.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
ONTARIO.																
Grand River Superintendency—																
Six Nations	2,283	29,466	2,507	59,150	218	4,330	968	49,088	336	2,252	465	7,198	23¼	230	40½	400
Parry Sound Superintendency	.....	.....	.....	850	..	100	.....	350	.....	460	....	.....	....	....	....	65
New Credit (Mississaguas) Agency	200	2,000	480	15,000	40	1,000	75	2,000	90	1,350	100	1,000	10	100	5	100
Walpole Island Agency	270	4,789	485	9,503	.....	.....	475	9,827	.....	.....	....	.....	....	.....	27	502
Sarnia "	290	6,077	564	15,379	34	918	162	6,822	13	392	....	.....	....	....	7	234
Caradoc "	613	9,482	508	14,664	38	856	299	15,345	31	438	..	.....	8	250	36	533
Moravian "	240	2,000	160	3,500	4	100	90	4,500	7	50	..	.....	7	60	16	200
Manitowaning "	236½	4,997	280	9,402	13	237	61½	1,345	352½	7,571	....	.....	....	.....	6¾	211
Gore Bay	114	1,121	182	2,222	8	90	19	537	205	2,484	....	.....	....	....	6½	102½
Thessalon "	.....	.....	47	948	.....	.....	18	646	38	740	....	.....	....	....	....	.....
*Sault Ste. Marie "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	....	.....	....	.....
Port Arthur "	18	360	45	1,680	.....	.....	2	80	3	140	....	.....	....	.....	....	8
Golden Lake "	1	15	5	65	....	.....	2½	120	2	20	2	40	....	.....	....	5
Tyendinaga "	446	6,316	1,259	27,488	865	16,557	197	6,172	75	496	165	1,937	4½	....	14	215
Lake Simcoe "	76	1,010	86	2,580	.....	.....	3	70	20	360	...	.....	5	75	1	20
Cape Croker "	75	1,200	124	3,200	5	200	50	1,500	80	1,500	....	.....	....	.....	4	80
Saugeen "	40	600	150	2,000	.....	.....	30	600	135	1,500	...	.....	....	.....	2	30
Alnwick "	118	2,043	146	3,315	.....	.....	4¾	238	134	2,440	101	1,396	10	180	+	15
Mud Lake "	30	500	63	1,534	2	40	1	20	13	260	....	.....	10	100	....	.....
Rice Lake "	87	1,530	46	930	.....	.....	1	20	76	620	....	.....	4	40	....	.....
Rama "	30	600	260	9,200	4	150	20	515	70	1,400	....	.....	..	.....	3	68
Christian Island "	30	500	80	1,600	.....	.....	50	500	35	400	....	.....	..	.....	10	100
Scugog "	51	492	47	1,333	.....	.....	.....	.....	16	348	3	25	.	...	....	.....
Indians of Christian Island Band residing on Manitoulin Island	2	35	5	60	.....	.....	2	15	3	60	....	.....	...	.....	½	15
Rat Portage Agency	.....	.....	.....	.....	.....	.....	6½	515	.....	.....	....	.....	....	.....	....	.....

Couchiching "	.....	.....	5	150	....	.....	.....	.....	.....	.....	....	.....	....	.....	....	.....
Savanne "	.....	.....	.....	.....	.....	.....	$2\frac{1}{2}$	150	.....	.....	....	.....	....	.....	....	.....
Total	5,250½	75,133	7,534	185,753	1,231	24,578	2,539¾	100,975	1,734½	25,281	836	11,596	81¾	1,035	180	2,903½
QUEBEC.																
Lake of Two Mountains Agency	52	549	471	6,210	14	201	39	1,050	13	230	....	.....	34	497	10½	185
Caughnawaga Agency.....	12	240	750	18,000	40	1,000	200	5,000	10	200	....	.....	75	1,500	10	250
St. Regis "	80	1,150	465	12,500	29	580	183	5,800	50	990	4	80	25	700	9	250
Viger "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	....	.....	....	.....
St. Francis "	.....	.....	62	931	.....	.....	4¼	52¼	2½	11	....	.....	3	19	7¾	29½
Lake St. John "	50	400	300	3,500	20	205	.....	.....	40	395	....	.....	58	1,060	....	.....
Maria "	5	80	35	806	.....	.....	.....	.....	.....	.....	....	.....	3	40	....	.....
Restigouche "	11	215	156	4,390	8½	245	.....	.....	6	132	....	.....	18	552	1	20
River Desert "	9	120	117	2,300	.....	.....	1	40	10	170	....	.....	15	300	1	25
Jeune Lorette "	.....	.....	14	350	....	.....	1	14	½	12	....	.....	1	10	1½	20
Becancour "	1½	35	20	322	5	15	½	16	notgiv'n	12	....	.....	5	25	¼	9
Temiscaming "	3½	216	38½	800	.....	.....	.....	.....	14	180	....	.....	....	....	....	.....
Bersimis "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	....	....	....	.....
Total	224	3,005	2,428½	50,103	116½	2,246	428¾	11,972¼	146	2,332	4	80	237	4,703	41	788½

* No return received ; new agent.
† Garden plots.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

AGRICULTURE, SEASON 1900—*Concluded.*

Agency.	Grain, Roots and Fodder—*Concluded.*										Other Fodder.	New Land Improvements.			
	Potatoes.		Carrots.		Turnips.		Other Roots.		Hay.						
	Acres Planted.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Cultivated.	Wild.		Land Cleared.	Land Broken.	Land Cropped for the first time.	Land Fenced.
Ontario.									Tons.	Tons.	Tons.	Acres.	Ac's	Acres.	Acres.
Grand River Superintendency—															
Six Nations	308	25,461	12½	1,923	18	2,607	124	4,162	2,867	.....	2,440	.. ..	....	.....	.....
Parry Sound Superintendency	.....	5,150	....	65	....	300	.....	98	337	29	.....	66	....	....	.....
New Credit (Mississaguas) Agency	60	2,400	2	100	5	200	5	200	300	.....	300	...	50	50	25
Walpole Island Agency	262	6,714	..	.....	....	.....	‡60	¶526	152	700	1,500	149	32	90	70
Sarnia "	109	6,036	.....	.....	6	320	.....	.....	544	12	509	44	31	31	26
Caradoc "	107	12,395	6	906	9	1,130	10	1.933	685	11	957	15	....	.....	21¼
Moravian "	25	2,000	....	.....	....	.....	4	2,000	200	.....	300	30	....	5	.....
Manitowaning "	326	16,414	2½	124	23	1,709	.....	.....	2,097½	23½	10	17	17	17	.....
Gore Bay "	226	6,161	2¾	54½	9¾	424	.....	.....	212½	.....	158	57½	24	24	24
Thessalon "	87	5,529	.....	.....	2	150	.....	.....	79	67	8	.....	....	.....	.....
*Sault Ste. Marie "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....
Port Arthur "	89	18,800	½	90	8¼	2,360	2	500	222	35	.....	23½	12½	11	13
Golden Lake "	7	645	.....	.....	½	50	.. ..	.....	16	30	4	....	....	....	....
Tyendinaga "	130¾	8,112	1	315	1¼	300	2	648	826	50	996	.....	....	....	....
Lake Simcoe "	15	1,400	.....	... ...	5	1,000	2	500	40	20	15	8	8	8	8
Cape Croker "	40	1,200	2	80	3	500	.....	.....	200	50	50	15	20	10	20
Saugeen "	60	3,000	½	50	5	700	10	300	100	5	10	15	30	15	15
Alnwick "	24½	2,175	Grdns	10	13½	1,956	½	158	103	.. ..	180	.....	....	....	....
Mud Lake "	10	500	...	.....	2	250	.....	.....	50	...	25	50	....	30	20
Rice Lake "	10	400	.....	.....	5	450	1	200	52	...	20	10	4	10	4
Rama "	35	3,200	4	600	4	700	2	60	350	18	10	.....	....	.....	....
Christian Island "	60	2,200	10	100	5	100	.....	.....	125	25	50	52	....	52	52
Scugog "	4½	295	.....	.....	....	.....	¼	20	25	.....	.... ..	.....	....	.....	.....
Indians of Christian Island Band residing on Manitoulin Island	6	185	1/10	8	....	.. ....	.....	.....	20	5	5	.....	.....	... .	.....

Rat Portage Agency	† 3	1,765	.....	.....	....	75	.....	.....	.....	166	.....	....	...	.....	.....
Couchiching "	$8\frac{1}{5}$	360	.....	.....	....	.....	.....	.....	17	56	.....	....	....	.....	...
Savanne "	$35\frac{3}{4}$	3,181	.....	.....	....	.....	.....	.....	.....	$49\frac{1}{2}$	.....	....	...	.....	..
Total	2,251	135,678	$43\frac{17}{20}$	$4,425\frac{1}{2}$	$125\frac{1}{4}$	15,281	$162\frac{3}{4}$	10,779	9,620	1,352	7,687	552	$228\frac{1}{2}$	353	$298\frac{1}{4}$
QUEBEC.															
Lake of Two Mountains Agency	111	4,961	.....	.....	$6\frac{1}{2}$	416	.....	.....	188	11	353	4	7	.....	10
Caughnawaga "	200	6,000	1	20	$\frac{1}{2}$	15	.....	.....	2,500	.....	.....	.....	...	.....	50
St. Regis "	125	7,000	6	250	10	650	6	500	1,050	200	590	....	....	7	25
Viger "	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	...	...	.....
St. Frances "	$47\frac{1}{4}$	2,164	.....	.....	....	.....	.....	.....	105	.....	3	4	....	6	.....
Lake St. John "	200	5,000	.....	.....	...	.....	.....	.....	100	20	80	110	...	70	25
Maria "	10	1,200	.....	.....	$\frac{1}{8}$	3	.....	.....	40	.....	10	5	5	5	5
Restigouche "	43	4,327	$1\frac{1}{2}$	52	2	100	.....	.....	225	25	100	8	6	3	3
River Desert "	29	2,200	.....	.....	7	1,700	1	20	180	11	126	25	20	30	11
Jeune Lorette "	4	300	$\frac{3}{4}$	34	1	70	4	260	172	104	136	.....	....	....	.....
Becancour "	$3\frac{1}{4}$	125	$\frac{1}{8}$	4	$\frac{1}{8}$	19	$1\frac{1}{2}$	60	32	.....	.....	....	....	.....	.....
Temiscaming "	18	1,404	.....	.....	2	90	.....	.....	47	...	$29\frac{1}{2}$	11	4	4	2
Bersimis "	14	666	.....	.....	....	.....	.....	.....	10	15	.....	.....	....	.....	....
Total	$804\frac{1}{2}$	35,347	$9\frac{3}{8}$	360	$29\frac{1}{4}$	3,053	$12\frac{1}{2}$	840	4,649	386	$1,427\frac{1}{2}$	167	42	125	131

* No return received ; new agent.
† Also $212\frac{1}{2}$ bushels planted in small plots.
‡ Sugar beets.
¶ Tons harvested.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PROGRESS DURING THE YEAR ENDED JUNE 30, 1901.

Agency.	Buildings Erected.														Increase in Value.		
	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	Root Houses.	Milk Houses.	Corn Cribs.	Value of Clearing, Cultivating and Fencing.	Value of Buildings.	Increased value of Agricultural Products and Industries.
ONTARIO.															$ cts.	$ cts.	$ cts.
Grand River Superintendency—Six Nations	....	....	4	15	2	9	7	3	2	7	....	2	2	6	....	3,300 00	3,300 00
Parry Sound Superintendency	....	....	1	6	1	....	2	....	1	....	....	....	....	....	990 00	1,000 00	1,990 00
New Credit (Mississaguas) Agency	....	....	3	....	....	1	2	....	3	10	....	....	2	1	275 00	1,000 00	1,275 00
Walpole Island Agency	....	....	2	....	....	....	5	....	....	....	2	1	4	6	900 00	200 00	1,100 00
Sarnia "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	440 00	440 00
Caradoc "	....	....	....	3	....	....	....	....	....	....	....	....	....	1	†	275 00	275 00
Moravian "	....	....	....	....	....	....	....	....	....	....	....	2	1	2	300 00	100 00	400 00
Manitowaning "	....	....	1	1	....	1	....	....	....	....	....	....	....	....	350 00	235 00	585 00
Gore Bay "	....	....	1	3	....	....	1	....	....	2	....	....	....	....	1,150 00	554 00	1,704 00
Thessalon "	....	....	9	12	11	4	....	....	....	....	3	....	....	....	....	1,840 00	1,840 00
*Sault Ste. Marie "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Port Arthur "	....	....	1	54	....	2	....	....	1	....	3	2	....	....	270 00	4,905 00	5,175 00
Golden Lake "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tyendinaga "	....	1	4	....	....	....	....	....	....	....	....	....	....	....	....	2,500 00	2,500 00
Lake Simcoe "	....	....	....	....	....	....	1	....	1	....	....	....	1	....	85 00	225 00	310 00
Cape Croker "	....	....	2	1	....	2	....	....	....	....	....	....	....	....	425 00	1,800 00	2,225 00
Saugeen "	....	....	....	1	....	....	2	....	....	....	....	....	....	....	300 00	200 00	500 00
Alnwick "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mud Lake "	....	....	1	....	....	....	1	....	....	....	....	....	....	....	550 00	500 00	1,050 00
Rice Lake "	....	....	1	....	....	1	....	....	....	....	....	....	....	....	400 00	200 00	600 00
Rama "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Christian Island "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	520 00	....	520 00
Scugog "	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	30 00	30 00
Indians of Christian Island Band residing on Manitoulin Isl'd.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rat Portage Agency	....	....	....	9	....	....	....	....	....	....	....	....	....	....	....	450 00	450 00
Couchiching "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Savanne "	....	....	....	9	....	....	....	....	....	....	....	....	....	....	....	900 00	900 00
Total	....	1	30	114	15	20	21	3	8	19	8	7	10	16	6,515 00	20,654 00	27,169 00

QUEBEC.																		
Lake of Two Mountains Agency			4			2	4	4		1	1		1	1	200 00	1,822 25	2,022 25
Caughnawaga	"		8			3				2					250 00	2,720 00	2,970 00
St. Regis	"		4			4	2		4	1				2	200 00	3,260 00	3,460 00
Viger	"																
St. Francis	"														75 00		75 00
Lake St. John	"		3			4			2	3		2	2		1,985 00	1,850 00	3,835 00
Maria	"		1			2			2	1			1		100 00	400 00	500 00
Restigouche	"		4			2	2		1	2			2		160 00	300 00	460 00
River Desert	"					2	2	1	2	2		2	2		1,157 00	490 00	1,647 00
Jeune Lorette	"		2													900 00	900 00
Becancour	"											1				35 00	35 00
Temiscauing	"			2											180 00	125 00	305 00
Bersimis	"		5													135 00	135 00
Total			31	2		19	10	5	11	12	1	5	8	3	4,307 00	12,037 25	16,344 25

* No return received ; new agent.

† Value not given.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

SOURCES AND VALUE OF INCOME.

Agency.	Value of Farm Products, Including Hay.	Wages Earned.	Received from Land Rentals.	The Estimated Value of Fish and Meat used for Food is Included in these columns.		Earned by Other Industries.	Total Income of Indians.
				Earned by Fishing.	Earned by Hunting.		
Ontario.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Grand River Superintendency—Six Nations	91,815 60	139,374 00	7,380 50	.....	.....	.....	238,570 10
Parry Sound Superintendency	7,439 00	17,600 00	.....	3,500 00	6,450 00	3,300 00	38,289 00
New Credit (Mississaguas) Agency	10,625 00	2,500 00	1,200 00	100 00	800 00	1,200 00	16,425 00
Walpole Island Agency	21,121 00	5,500 00	.....	2,195 00	472 00	16,374 00	45,662 00
Sarnia "	16,760 00	4,725 00	1,248 00	2,258 00	20 00	2,099 00	27,110 00
Caradoc "	29,365 00	30,582 00	4,156 22	105 00	175 75	9,451 80	73,835 77
Moravian "	6,305 00	2,400 00	74 00	600 00	750 00	1,950 00	12,079 00
Manitowaning "	26,471 00	23,125 00	1,850 00	19,610 00	59,250 00	12,500 00	142,806 00
Gore Bay "	7,421 15	28,495 00	.....	25 00	25 00	4,250 00	40,216 15
Thessalon "	3,844 00	12,565 00	300 00	1,359 00	2,420 00	1,525 00	22,013 00
*Sault Ste. Marie "	.....	.....	.....	.....	.....	.....	.....
Port Arthur "	11,708 00	12,700 00	.....	11,300 00	27,050 00	3,200 00	65,958 00
Golden Lake "	789 00	2,793 00	.....	.....	447 00	817 00	4,846 00
Tyendinaga "	59,296 21	8,500 00	4,894 85	370 00	197 15	3,402 61	76,660 82
Lake Simcoe "	2,553 50	1,925 00	160 00	932 00	43 00	1,950 00	7,563 50
Cape Croker "	7,250 00	2,000 00	.....	4,000 00	300 00	3,000 00	16,550 00
Saugeen "	4,315 00	9,000 00	15 00	100 00	200 00	10,000 00	23,630 00
Alnwick "	7,324 72	4,923 00	1,655 11	283 00	169 00	626 00	14,980 83
Mud Lake "	2,350 00	1,000 00	1,660 00	300 00	1,000 00	1,000 00	7,310 00
Rice Lake "	1,500 00	400 00	929 76	200 00	650 00	500 00	4,179 76
Rama "	5,951 00	4,000 00	.....	350 00	200 00	750 00	11,251 00
Christian Island "	3,940 00	2,000 00	.....	800 00	800 00	5,000 00	12,540 00
Scugog "	1,109 80	125 00	132 25	104 00	148 00	165 00	1,784 05
Indians of Christain Island Band residing on Manitoulin Island	340 00	500 00	186 00	500 00	1,000 00	300 00	2,826 00
Rat Portage Agency	2,077 50	8,295 00	.....	4,020 00	9,039 94	5,105 00	28,537 44
Couchiching "	.....	8,100 00	.....	4,300 00	4,086 00	7,931 00	24,417 00
Savanne "	2,000 50	6,385 00	.....	3,980 00	20,321 77	2,330 00	35,017 27
Tota	333,671 98	339,512 00	25,841 69	61,291 00	136,014 61	98,726 41	995,057 69

QUEBEC.							
Lake of Two Mountains Agency	8,635 70	11,703 00	850 00	74 00	1,176 50	6,884 55	29,323 75
Caughnawaga "	27,235 50	71,315 00	780 00	.....	.....	2,625 00	101,955 50
St. Regis "	21,227 00	25,800 00	147 85	3,800 00	4,500 00	15,500 00	70,974 85
Viger "	.....	2,455 00	243 23	174 00	880 00	3,055 00	6,807 23
St. Francis "	1,672 30	1,035 00	225 00	95 00	900 00	24,832 00	28,759 30
Lake St. John "	6,720 50	4,000 00	.....	500 00	23,000 00	1,000 00	35,220 50
Maria "	1,550 00	2,500 00	.....	300 00	200 00	1,200 00	5,750 00
Restigouche "	15,530 00	12,000 00	25 00	150 00	200 00	1,335 00	29,240 00
River Desert "	3,018 00	5,810 00	200 00	60 00	3,260 00	11,352 00	23,700 00
Jeune Lorette "	1,000 00	5,000 00	.....	75 00	500 00	15,000 00	21,575 00
Becancour "	350 00	2,000 00	.....	25 00	50 00	325 00	2,750 00
Temiscaming "	1,988 30	5,474 00	10 00	189 50	1,045 00	1,430 00	10,136 80
Bersimis "	581 50	1,070 00	.....	1,998 00	66,027 00	1,208 00	70,884 50
Total	89,508 80	150,162 00	2,481 08	7,440 50	101,738 50	85,746 55	437,077 43

* No return received ; new agent.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

REALTY OF INDIANS.

Agency.	Land.		Public Buildings, Property of the Band.						Private Fencing and Buildings.				
	Cleared, including natural pasturage.	Cultivated, including made pasturage.	Churches.	Council Houses.	School Houses.	Driving Sheds.	Other Buildings.	Ferries.	Acres Fenced.	Dwellings, Stone.	Dwell ngs, Brick.	Dwellings, Frame.	Dwellings, Log.
New Brunswick.	Acres.	Acres.											
Richibucto Superintendency	2,115	890	6	.....	3	.....	5	.....	830	....	....	138	.....
Fredericton "	178	488½	2	1	3	.....	3	.....	324¼	....	.....	104	11
Total.	2,293	1,378½	8	1	6	.....	8	.....	1,154¼	.....	....	242	11
Prince Edward Island.													
Prince Edward Island Superintendency	304	260	1	.....	1	.....	2	....	262	.....	....	43	.....
Nova Scotia.													
Annapolis County	.....	.....	....	....	.....	.....	.....	.....	....	.....	.....	6	.....
Shelburne "	.....	10½	.....	....	....	....	.....	.....	18	.....	.....	8	.....
Digby "	200	48	1	....	1	1	.....	....	300	.....	.....	26	.....
Yarmouth "	10	4	....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
King's "	4	4	....	....	.....	.....	.....	.....	20	.....	.....	9	.....
Queen's "	200	200	.....	....	....	.....	.....	.....	150	.....	....	16	.....
Halifax "	38	15	.....	.....	1	.....	.....	.....	25	.....	.....	19	3
Hants "	212	88	1	.....	1	.....	2	.....	80	....	.....	15	.....
Colchester "	21¼	13¾	....	....	1	.....	.....	.....	20	.....	....	18	.....
Cumberland "	104	51	1	.....	.....	....	.....	.....	75	.....	.....	20	.....
Pictou "	34	15	1	.....	1	.....	.....	.....	.....	.....	.....	23	.....
Antigonish and Guysborough Counties	360	180	1	..	.....	.....	.....	.....	200	.....	....	35	.....
Richmond County	106	132	1	.....	1	.....	.....	1	141	....	..	10	4
Inverness "	405	660	.....	.....	1	....	.....	.....	651	.....	.....	23	5

Victoria "	190	60							160			11	2
Cape Breton "	1,700	1,700	1		1				1,700			17	2
Lunenburg "	300	450			1				450			13	1
Total	3,884¼	3,631¼	7		9	1	2	1	3,990			269	17
British Columbia.													
Cowichan Agency	5,527	2,963	2		6				5,181			539	10
West Coast "	360	62			1				62			328	
Kwawkewlth Agency	309	19			5				19			79	2
Lower Fraser "	3,401	3,723	42	5					4,753			751	62
Williams Lake "	59,807½	1,610½	20						22,141			4	422
Kamloops-Okanagan Agency	230,699	7,660	34	5					47,812			114	886
Kootenay Agency	38,846	895	5						895			7	128
Northwest Coast Agency	498	185	18	7	18	6	22		144			773	13
Babine and Upper Skeena River Agency	17,701½	365	2				1		484			287	458
	357,149	17,482½	123	17	30	6	23		81,491			2,882	1,981
Manitoba.													
Clandeboye Agency	47,355	334			8			3	2,559½			7	307
Portage la Prairie Agency	26,248	592	1	1	2		3		2,710				39
Manitowapah Agency	33,533	242	6	3	9	7	13		243				197
Rat Portage (Buffalo Bay Band) Agency	200	3											7
Berens River Agency	16,889½	286½	7	1	9				298			1	338
The Pas "	16,330½	59½		1	4		8		65				182
Total	140,556	1,517	14	6	32	7	24	3	5,875½			8	1,070

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

REALTY OF INDIANS—*Concluded.*

Agency.	Private Buildings.									
	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	Root Houses.	Milk Houses.	Corn Cribs.
New Brunswick.										
Richibucto Superintendency	64	56	43	.....	41	39	.....	41	2	.....
Fredericton "	12	17	36	2	16	27	.....	6	6	.....
Total	76	73	79	2	57	66	.....	47	8	.....
Prince Edward Island.										
Prince Edward Island Superintendency	3	27	23	.....	23	6	3	41	6	.....
Nova Scotia.										
Annapolis County	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shelburne "	.....	4	.....	.....	.....	3	.....	.....	.....	.....
Digby "	5	5	.....	.....	3	2	.....	.....	.....	.....
Yarmouth "	.....	.....	4	.....	1	.....	.....	.....	.....	.....
King's "	3	2	1	.....	2	1	.....	.....	.....	.....
Queen's "	2	2	.....	.....	.....	3	.....	.....	.....	.....
Halifax "	12	6	2	.....	.....	.....	.....	.....	.....	.....
Hants "	2	7	1	.....	7	.....	.....	.....	.....	.....
Colchester "	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland "	8	4	4	.....	3	1	.....	.....	.....	.....
Pictou "	4	5	.....	.....	.....	.....	.....	.....	.....	.....
Antigonish and Guysborough Counties	10	15	.....	.....	.....	.....	5	.....	.....	.....
Richmond County	10	8	.....	.....	.....	.....	.....	.....	1	.....
Inverness "	2	9	.....	.....	1	1	.....	.....	2	.....
Victoria "	6	7	.....	.....	.....	2	.....	.....	.....	.....
Cape Breton "	2	13	.....	.....	.....	.....	.....	.....	.....	.....
Lunenburg "	.....	10	.....	.....	.....	4	.....	.....	.....	.....
Total	72	98	12	.....	17	17	5	.....	3	.....

British Columbia.										
Cowichan Agency	24	205	4	60	7					
West Coast "	433									
Kwawkewlth "	174				2	3				
Lower Fraser "	296	300	280	1	269	92	8	51	1	
Williams Lake "			183			34		19		
Kamloops-Okanagan Agency	25	24	594	5	106	79	61	353	13	
Kootenay Agency	86	23	20		16			22		
Northwest Coast Agency	114	14	16		15	5	51	185	2	
Babine and Upper Skeena River Agency	216		59		49		17	98		
Total	1,368	566	1,156	66	464	213	137	728	16	
Manitoba.										
Clandeboye Agency		14	55	2	123		78	30	28	2
Portage la Prairie Agency	45		35		37	2	2	3	2	
Manitowapah "	23		76		152	16	59	3	19	
Rat Portage "			3							
Berens River "					159		39		1	
The Pas "			2		75		11		4	
Total	68	14	171	2	546	18	189	36	54	2

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS.

Agency.	Agricultural Implements, Vehicles, &c.															
	Ploughs.	Harrows.	Seed Drills.	Cultivators.	Land Rollers.	Mowers.	Reapers.	Horse Rakes.	Fanning Mills.	Threshing Machines.	Tool Chests.	Other Implements.	Wagons.	Carts.	Sleighs, Draught.	Sleighs, Driving.
New Brunswick.																
Richibucto Superintendency	25	19	.. ..	.....	.....	1	.....	.....	...	.....	....	392	26	1	24	4
Fredericton "	31	43	. ...	17	5	1	.....	7	2	... ..	.....	240	30	.....	31	23
Total	56	62	....	17	5	2	.....	7	2	.....	.....	632	56	1	55	27
Prince Edward Island.																
Prince Edward Island Superintendency	8	12	.....	1	2	.....	....	.....	1	1	5	111	4	5	12	3
Nova Scotia.																
Annapolis County	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....
Shelburne "	2	1	.. ...	.....	.....	...	.....	.....	.....	.....	.....	20	.. ..	.....	.....	.....
Digby "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	...	...
Yarmouth "	.....	.....	.....	.. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.. .	.....
King's "	1	1	.....	. ..	.....	...	.....	.....	.....	.....	1	.....	1	1	1	1
Queen's "	1	1	.....	.....	.....	...	.....	.....	.....	.....	.....	6	2	1	1	1
Halifax "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1	.....	1	.....
Hants "	2	1	. .	5	.....	1	.....	1	.....	...	10	50	2	.....	5	6
Colchester "	.....	.....	.. ..	....	.....	.....	.. ..	.....	...	.....	.....	5	.....	.....	.....	.....
Cumberland "	.....	1	.. ..	.. ..	.....	.....	.....	.....	.....	.....	.....	20	4	.. .	4	2
Pictou "	2	1	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	3	2	4	2
Antigonish and Guysborough Counties	2	.....	... ..	..	.....	.....	.....	.....	.....	.....	.....	.....	1	1	2	.....
Richmond County	1	.... ..	.....	..	.....	...	.....	.....	.....	.....	.....	35	2	1	9	4
Inverness "	6	4	. ....	2	.....	.....	...	1	.....	.....	3	130	.....	4	4	3
Victoria "	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110	.....	2	2	.....

Cape Breton "	4	3				3						50	3	8	8	1
Lunenburg "	3	2										12	4	2	2	1
Total	26	16		7		4		2			14	499	24	23	43	21
British Columbia.																
Cowichan Agency	140	81			2	24	9	17		7		4,070	151	1	6	4
West Coast "	1	1										8		2		
Kwawkewlth "	1											530				
Lower Fraser "	111	94	1	3		22	4	2		2		1,978	94	6	9	4
Williams Lake Agency	143	72		3	79	46	3	29	14	1		602	74		140	11
Kamloops-Okanagan Agency	511	341	3	9	260	109	16	77	26	4		1,814	201	1	316	69
Kootenay Agency	75	23				21	4	15	2	1		136	41		48	1
Northwest Coast Agency											118	2,200				
Babine and Upper Skeena River Agency												6,593				
Total	982	612	4	15	341	222	36	140	42	15	118	17,931	571	10	519	89
Manitoba.																
Clandeboye Agency	85	66				88		70			3	880	74	5	93	39
Portage la Prairie Agency	24	19	5			13	6	11	1		4	64	21	28	19	28
Manitowapah "	28	22				32		29			8	435	34	42	37	80
Rat Portage "	1	1										3				
Berens River "	48	29									9	1,108	1	3		
The Pas "	12	14				2		2			4	316	2	2	1	
Total	198	151	5			135	6	112	1		28	2,806	132	80	150	147

AGRICULTURE AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS—*Continued.*

Agency.	Agricultural Implements, Vehicles, &c.—*Con.*		Value of Implements and Vehicles.	Live Stock and Poultry.											
				Horses.			Cattle.					Other Stock.				
	Democrat Wagons.	Buggies and Road Carts.		Stallions and Geldings.	Mares.	Colts, Fillies and Foals.	Bulls.	Oxen, Work.	Steers.	Cows, Milch.	Young Stock.	Sheep.	Lambs.	Boars, Breeding.	Sows, Breeding.	Pigs.
New Brunswick.			$ cts.													
Richibucto Superintendency	.....	14	2,090 00	15	11	.....	.....	11	....	42	66	.....	...	..	....	23
Fredericton "	1	2	3,050 00	18	12	5	.....	....	4	22	47	7	5	7	14	82
Total	1	16	5,140 00	33	23	5	....	11	4	64	113	7	5	7	14	105
Prince Edward Island.																
Prince Edward Island Superintendency	.....	.....	620 00	7	4	2	.....	....	2	13	30	8	4	....	....	3
Nova Scotia.																
Annapolis County	.....	.....	33 00	.....	.....	.....	.....	2	....	.....	.....	.....	...	....	.....	.....
Shelburne "	.....	.....	50 00	.....	.....	.....	.....	.....	....	2	3	.....	.....	.....	.....	.....
Digby "	.....	.....	20 00	....	...	.....	.....	.....	....	1	1	..	.....	.....	.....	.....
Yarmouth "	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
King's "	.....	1	50 00	1	.....	1	.....	.....	2	2	2	.....	.....	.....	.....	1
Queen's "	.....	.....	45 00	1	.....	.....	.....	4	4	6	4	10	5	....	.....	4
Halifax "	.....	.....	40 00	.....	.....	.....	.....	.....	....	4	.....	.....	.....	.....	.....	1
Hants "	4	6	1,800 00	2	2	1	1	....	4	8	20	....	.....	.....	5	10
Colchester "	.....	.....	3 50	.....	.....	.....	.....	.....	....	1	1	.....	.....	.....	.....	.....
Cumberland "	1	2	250 00	1	3	.....	.....	.....	....	2	.....	.....	.....	.....	.....	3
Pictou "	.....	.....	400 00	3	1	.....	.....	.....	....	.....	2	.....	.....	.....	.....	.....
Antigonish and Guysborough Counties	.....	.....	50 00	....	2	.....	....	1	4	5	3	12	.....	.....	.....	3
Richmond County	.....	.....	135 00	1	6	.....	1	....	4	11	8	....	.....	.....	.....	.....
Inverness "	.....	3	418 00	3	2	....	.....	.....	..	25	34	.....	.....	.....	.....	.....
Victoria "	.....	.....	190 00	1	1	.....	.....	.....	2	12	16	.....	.....	.....	.....	2

Cape Breton "			550 00	3	7		2		20	21	25	24	12			
Lunenburg "			150 00	3	1			4	6	18	14	35	18			6
Total	5	12	4,184 70	19	25	2	4	11	46	118	133	81	35		5	30
BRITISH COLUMBIA.																
Cowichan Agency	22	91	18,810 00	155	174	92	20	41	58	337	270	943	528		1	4
West Coast "		11	870 00	12	13	7	9		3	46	45					2
Kwawkewlth Agency			310 00		2					1	3			1	4	13
Lower Fraser "	1	1	13,937 00	282	283	113	45	72	88	702	478	307	481	47	255	1,896
Williams Lake "	11	4	19,126 25	1,148	539	488	18		136	336	234			19	51	615
Kamloops-Okanagan Agency	39	50	50,627 00	2,994	3,241	3,158	46		162	803	1,184	17	21	31	277	661
Kootenay Agency	5		9,014 00	875	745	795	30		62	585	600					
Northwest Coast Agency			5,330 00	29	30	24	12	8	28	40	29	4	5	2	7	22
Babine and Upper Skeena River Agency			1,865 00	408	53	5	21		28	248	115					
Total	78	157	119,889 00	5,903	5,080	4,682	201	121	565	3,198	2,958	1,271	1,035	100	595	3,213
MANITOBA.																
Clandeboye Agency	32	33	11,100 00	120	92	21	4	152	28	217	198	10				55
Portage la Prairie Agency	6	19	3,880 00	82	74	41	4	29	14	42	34				2	9
Manitowapah "	6	24	4,530 00	119	81	66	16	45	102	356	468	4		2	7	15
Rat Portage "			21 50	2	2											
Berens River "			1,709 00	6	9	2	22	83	47	133	72					
The Pas "			875 00	12	11	9	10	16	13	94	74					
Total	44	76	22,015 50	341	269	139	56	325	204	842	846	14		2	9	79

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS—*Concluded.*

Agency.	Live Stock and Poultry—*Con.*				Value of Live Stock and Poultry.	General Effects.								Household Effects.	Value of Real and Personal Property.
	Poultry.														
	Turkeys.	Geese.	Ducks.	Cocks and Hens.		Sail Boats.	Row Boats.	Canoes.	Rifles.	Shot Guns.	Nets.	Steel Traps.	Tents.	Value of.	Value of.
New Brunswick.					$ cts.									$ cts.	$ cts.
Richibucto Superintendency	....	.....	. ...	100	2,945 00	46	32	50	.....	153	215	151	.....	5,850 00	8,000 00	68,435 00
Fredericton "	....	11	. ...	520	3,400 00	. ....	4	102	55	46	3	416	26	3,040 00	6,955 00	70,298 50
Total..... ...	....	11	.....	620	6,345 00	46	36	152	55	199	218	567	26	8,890 00	14,955 00	138,733 50
Prince Edward Island.																
Prince Edward Island Superintendency.....	...	3	1	166	1,505 00	2	26	1	.....	13	5	19	.....	520 00	2,830 00	40,425 00
Nova Scotia.																
Annapolis County..	.. .	.....	2	6	80 00	....	. ....	7	4	10	8	18	.....	220 00	200 00	1,803 20
Shelburne "	....	.....	4	30	80 00	.. ...	3	2	2	8	. .	.....	.. .	150 00	200 00	1,780 00
Digby "	....	...	.....	10	38 00	.....	.....	10	9	6	.....	20	3	324 00	300 00	4,257 00
Yarmouth "	....	.....	.....	.....	... .	.....	...	6	7	2	..	10	4	108 00	20 00	308 00
King's "	....	.....	.....	10	150 00	.....	1	1	.....	20	. ..	20	.....	150 00	200 00	2,450 00
Queen's "	....	.	.....	.....	287 00	....	.....	6	4	6	5	10	2	155 00	150 00	2,153 00
Halifax "	....	.....	....	15	75 00	1	2	.....	.....	6	1	1	2	100 00	200 00	515 00
Hants "	....	.....	..	30	1,575 00	1	2	1	6	15	.....	100	.....	1,500 00	3,000 00	24,970 00
Colchester "	....	.....	.....	35	44 00	....	.....	.....	3	12	.....	20	1	85 00	216 00	1,919 50
Cumberland "	....	.....	.. ...	40	250 00	.....	1	4	9	20	... .	50	.....	180 00	500 00	3,830 00
Pictou "	....	.....	.....	.....	250 00	...	5	.....	.....	6	3	.... .	..	100 00	150 00	7,200 00
Antigonish and Guysborough Counties..... ...	....	.....	....	50	320 00	1	3	.....	.....	25	.....	5	.....	120 00	1,295 00	7,945 00
Richmond County	....	...	.....	60	545 00	7	11	.....	....	10	.....	12	....	792 00	150 00	22,091 00
Inverness "	....	.....	.....	55	834 00	3	13	.....	.... .	16	5	72	. ...	205 00	880 00	15,047 00

Victoria "	....	.....	.....	100	500 00	1	13	.....	.....	11	1	80	.....	400 00	500 00	11,990 00
Cape Breton "	....	.....	.....	.....	700 00	2	3	3	7	10	.....	1	.....	153 00	300 00	13,323 00
Lunenburg "	12	10	10	25	800 00	....	....	4	2	6	.....	17	4	111 00	175 00	4,968 00
Total	12	10	16	466	6,528 00	16	57	44	53	189	23	436	16	4,853 00	8,436 00	126,549 70
BRITISH COLUMBIA.																
Cowichan Agency	....	222	485	3,955	39,490 00	191	.....	443	347	297	53	18	122	25,800 00	31,625 00	819,634 00
West Coast Agency	....	.....	12	598	3,857 00	12	11	1,346	85	425	81	218	123	35,886 00	34,700 00	192,224 00
Kwawkewlth "	....	.....	.....	321	402 50	15	19	480	117	193	109	1,037	.....	13,444 00	52,300 00	118,508 00
Lower Fraser "	....	20	977	2,809	61,413 00	77	157	464	428	457	151	1,237	408	43,874 00	58,766 00	1,132,575 00
Williams Lake Agency	3	5	.....	1,880	88,057 50	.....	17	93	407	129	156	1,240	217	12,256 00	13,939 00	356,816 25
Kamloops-Okanagan Agency	...	18	24	2,412	144,937 50	4	48	146	685	277	470	1,526	1,035	21,221 00	45,750 00	2,046,721 80
Kootenay Agency	10	.....	.....	205	85,740 00	.....	....	40	147	23	.....	107	130	3,372 00	2,750 00	258,419 50
Northwest Coast Agency	....	.....	10	1,543	6,474 00	282	293	1,521	1,156	353	287	6,050	.....	104,950 00	92,900 00	739,077 00
Babine and Upper Skeena River Agency	...	.....	.....	.....	43,730 00	.....	.....	347	619	334	88	2,385	53	46,405 00	17,505 00	261,187 00
Total	13	265	1,508	133,723	474,101 50	581	545	4,880	3,991	2,488	1,395	13,813	2,088	307,208 00	350,235 00	5,925,161 00
MANITOBA.																
Clandeboye Agency	....	.....	.....	965	32,000 00	20	268	49	24	222	1,330	2,029	323	18,000 00	11,700 00	405,151 90
Portage la Prairie Agency	....	.....	....	15	6,850 00	.....	.....	9	11	28	14	475	90	1,150 00	650 00	193,613 00
Manitowapah Agency	....	....	....	137	27,950 00	22	69	100	22	167	378	2,145	150	3,460 00	5,350 00	169,645 00
Rat Portage "	....	.....	.....	.....	80 00	1	.....	15	.....	4	6	30	3	232 00	100 00	5,421 50
Berens River "	....	.....	...	86	14,630 00	11	293	355	33	365	1,417	2,267	329	27,542 00	19,419 00	133,784 10
The Pas "	....	.....	.....	10	5,048 00	.....	16	234	18	201	315	2,217	103	6,140 00	2,875 00	91,417 00
Total	....	.....	....	1,213	86,558 00	54	646	762	108	987	3,460	9,162	998	56,524 00	40,094 00	999,032 50

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

AGRICULTURE, SEASON 1900.

Agency.	Grain, Roots and Fodder.															
	Wheat.		Oats.		Barley.		Corn.		Pease.		Rye.		Buck-wheat.		Beans.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
NEW BRUNSWICK.																
Richibucto Superintendency	42	620	210	4,540	.....	.....	.....	.....	.....	.....	....	.....	12	285	....	.....
Fredericton "	1½	40	106	2,545	.....	.....	.....	.....	3¼	64	....	.....	40	1,145	5¾	79
Total	43½	660	313	7,085	.....	.....	.....	.....	3¼	64	....	.....	52	1,430	5¾	79
PRINCE EDWARD ISLAND.																
Prince Edward Island Superintendency	21	325	50	1,460	½	.....	1	10	¼	2	....	.....	*	10	¼	6
NOVA SCOTIA.																
Annapolis County	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shelburne "	.....	.....	1½	†	.....	.....	⅛	3	⅛	7	.....	.....	.....	.....	⅛	7
Digby "	.....	.....	1½	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	⅛	3
Yarmouth "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
King's "	.....	.....	2	60	.....	.....	.....	.....	.....	.....	.....	.....	1	30	1	40
Queen's "	.....	.....	1	25	.....	.....	.....	.....	.....	.....	.....	.....	½	12	.....	.....
Halifax "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hants "	.....	.....	22	440	.....	.....	.....	.....	.....	.....	.....	.....	5	100	14	50
Colchester "	.....	.....	2¼	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland "	.....	.....	2	40	.....	.....	.....	.....	.....	.....	.....	.....	*	20	.....	.....
Pictou "	¾	*	7	*	.....	.....	.....	.....	.....	.....	.....	.....	½	*	.....	.....
Antigonish and Guysborough Counties	1	10	20	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	⅛	10
Richmond County	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	⅛	1
Inverness "	.....	.....	5	70	.....	.....	3	90	.....	.....	.....	.....	.....	.....	.....	.....
Victoria "	.....	.....	2	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Cape Breton "																	
Lunenburg "			4¾	89	1	25					2½	60			⅛	3½
Total	1¾	10	71	871	1	25	3⅛	93	⅛	7	2½	60	7	162	16	114½
BRITISH COLUMBIA.																
Cowichan Agency	29	550	475	17,055					33	680						
West Coast "																
Kwawkewlth "																
Lower Fraser "	106	4,140	459½	34,590	4	125	22½	1,120	186	7,080					20¼	656
Williams Lake Agency	249	4,488	377	20,560	28	535	2	70	32¾	744					4¾	131
Kamloops-Okanagan Agency	1,654	28,170	1,501	26,459	16½	324	9¼	80	122½	2,412					82	2,257
Kootenay "	48	810	595	8,700												
Northwest Coast "																
Babine & Upper Skeena River Agency			21	†	6	†										
Total	2,086	38,158	3,428½	107,364	54½	984	33¾	1,270	474¼	10,916					107	3,044
MANITOBA.																
Clandeboye Agency	59	885	85½	1,810	72	1,440	5	150							4	100
Portage la Prairie Agency	436	1,950	78	957	34	400	1¼	45								
Manitowapah "			4	2	1½	4	¼	5								
Rat Portage "							1½	*								
Berens River "					30	120										
The Pas "																
Total	495	2,835	167½	2,769	137½	1,964	8	200							4	100

*Not given.
†Cut and used for fodder.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

AGRICULTURE, SEASON 1900—*Concluded.*

Agency.	Grain, Roots and Fodder—*Concluded.*										Other Fodder.	New Land Improvements.			
	Potatoes.		Carrots.		Turnips.		Other Roots.		Hay.						
	Acres Planted.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested	Cultivated.	Wild.		Land Cleared.	Land Broken.	Land Cropped for the first time.	Land Fenced.
New Brunswick.									Tons.	Tons.	Tons.	Acr's.	Acr's.	Acr's.	Acr's.
Richibucto Superintendency	194	8,925	.. ..	.....	3	150	.....	.....	202	17	470	4	4	4	4
Fredericton "	55¾	3,162	.....	.....	5	560	6¾	301	155½	5	66½	1	.....	.....	.....
Total	249¾	12,087	.....	.....	8	710	6¾	301	357½	22	536½	5	4	4	4
Prince Edward Island.															
Prince Edward Island Superintendency	15½	1,663	.....	.....	.....	.....	.....	.....	33½	26	72	4	4	4	4
Nova Scotia.															
Annapolis County	2	100	.....	.....	..	.....	....	.. ....	6	.....	.....	....	....	.....	.....
Shelburne "	4	170	½	20	...	.....	1	30	5¼	.....	1½	....	...	.....	....
Digby "	3½	200	.....	...	⅛	12	¼	7	16	.....	.....	.....	...	.....	.....
Yarmouth "	.....	.....	....	....	....	.....	.....	.....	....	.....	.....	10	....	.....	.....
King's "	5	700	..	.....	...	.....	.....	.....	5	10	2	2	....	2	20
Queen's "	3½	320	....	....	..	.....	....	.. ....	29	10	.....	.....	½	...	½
Halifax "	2	*	½	...	1	*	1	.....	15	5	.....	.....	...	...	...
Hants "	10	1,500	..	.....	1	250	1	150	100	75	25	2	3	3	10
Colchester "	2¼	177	.....	.....	..	.....	....	.. ....	4	... .	.....	....	....	.....	.....
Cumberland "	6	500	...	...	*	150	....	.....	4	4	.....	..	...	1	.....
Pictou "	6	*	....	.....	.....	.....	....	.....	6	.. ....	.....	...	1	...	....
Antigonish and Guysborough Counties	4	200	....	....	...	.. ....	....	.. ....	50	.....	.....	.....	2	2	...
Richmond County	6	552	....	.....	...	6	.....	.....	30	21	.....	....	2	1	2
Inverness "	29	1,595	.. ...	.....	1	50	....	.....	120	.....	.....	2	3	5	10
Victoria "	10	800	.. ...	.....	.....	.....	....	.....	90	125	2	3	.....	2	2

Cape Breton "	200	1,600	.....	.....	.....	.....	.....	.....	80	.....	.....	.....	.....	.....	.....
Lunenburg "	5½	540	.....	.....	¾	100	....	.....	49	20	.....	2½	1	2½	5
Total	298¾	8,954	1	20	4⅜	568	3¼	187	609¼	270	30½	21½	12½	18½	49½
British Columbia.															
Cowichan Agency	88	4,085	.....	.....	.....	.....	.....	.....	1,238	.....	.....	4	12	12	.....
West Coast "	10	838	*	108	.....	.....	.....	.....	4	3½	.....	3	.....	.....	3
Kwawkewlth "	4	380	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lower Fraser "	264½	41,122	15½	1,783	33½	5,262	....	.....	661	940	382	22	22	22	22
Williams Lake Agency	179	9,615	26¾	774	28¾	1,753	9	408	367	921	873	.....	25	30	65
Kamloops-Okanagan Agency	237½	31,598	20	2,490	12⅝	1,603	2	233	3,054	592	645	65	191	191	605
Kootenay "	67	9,000	.....	.....	.....	.....	.....	.....	110	205	45	.....	185	185	185
Northwest Coast "	87½	10,175	2	170	13	1,415	6½	695	24	45	6	6	.....	.....	.....
Babine and Upper Skeena River Agency	244½	45,665	.....	.....	56¾	9,675	.....	.....	71	194	.....	55	20	16	33
Total	1,182	152,478	64¼	5,325	144¾	19,708	17½	1,336	5,529	2,900½	1,951	155	455	456	913
Manitoba.															
Clandeboye Agency	94½	9,750	1	30	½	15	¼	8	.....	6,200	.....	172	34	½	6½
Portage la Prairie Agency	10	900	1⅛	6	3¼	55	¾	5	.....	898	64	....	25	....	.....
Manitowapah "	53	3,218	2	2	2½	62	2½	88	.....	2,769	.....	.....	8	.....	6
Rat Portage "	184	*	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....
Berens River "	†	8,910	.....	.....	.....	.....	.....	.....	.....	809	.....	.....	.....	.....	.....
The Pas "	49	4,045	.....	.....	.....	.....	.....	.....	.....	279	.....	2½	1	1	17¼
Total	390½	26,823	4⅛	38	6¼	132	3½	101	.....	10,965	64	174½	68	1½	29¾

*Not given.
†7 bushels planted.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PROGRESS DURING THE YEAR ENDED JUNE 30, 1901.

Agency.	Buildings Erected.														Increase in Value.		
	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	Root Houses.	Milk Houses.	Corn Cribs.	Value of Clearing, Cultivating and Fencing.	Value of Buildings.	Increased value of Agricultural Products and Industries.
															$ cts.	$ cts.	$ cts.
New Brunswick.																	
Richibucto Superintendency	....	....	4	....	....	....	....	....	....	2	....	....	....	....	200 00	2,552 00	2,752 00
Fredericton "	....	....	3	1	4	3	2	....	....	1	....	....	2	....	15 00	520 00	535 00
Total	....	....	7	1	4	3	2	....	....	3	....	....	2	....	215 00	3,072 00	3,287 00
Prince Edward Island.																	
Prince Edward Island Superintendency	....	....	2	....	1	1	1	....	....	....	....	....	3	....	70 00	250 00	320 00
Nova Scotia.																	
Annapolis County	....	....	6	....	6	1	....	....	1	....	....	....	....	....	.....	800 00	800 00
Shelburne "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....
Digby "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....
Yarmouth "	....	....	3	....	1	....	....	....	....	....	....	....	....	....	100 00	110 00	210 00
King's "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	100 00	.....	100 00
Queen's "	....	....	....	....	....	....	....	....	....	1	....	....	....	....	10 00	25 00	35 00
Halifax "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....
Hants "	....	....	3	1	....	....	....	....	1	....	....	....	....	....	950 00	200 00	1,150 00
Colchester "	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....
Cumberland "	....	....	....	....	3	....	....	....	....	....	....	....	....	....	.....	100 00	100 00
Pictou "	....	....	1	....	....	....	....	....	....	....	....	....	....	....	100 00	100 00	200 00
Antigonish and Guysborough Counties	....	....	3	....	3	....	....	....	....	....	....	....	....	....	20 00	100 00	120 00
Richmond County	....	....	1	1	2	....	....	....	....	....	....	....	....	....	20 00	25 00	45 00
Inverness "	....	....	1	....	....	1	....	....	....	....	....	....	....	....	100 00	300 00	400 00
Victoria "	....	....	....	....	....	1	....	....	....	....	....	....	....	....	50 00	50 00	100 00
Cape Breton "	....	....	17	3	1	16	....	....	....	....	....	....	....	....	.....	120 00	120 00

Lunenburg "			1							1					75 00	100 00	17 00
Total			36	5	16	19			2	2					1,525 00	2,030 00	3,555 00
British Columbia.																	
Cowichan Agency			4	1		2	1								225 00	665 00	890 00
West Coast "			31												550 00	7,050 00	7,600 00
Kwawkewlth "			9		4											1,175 00	1,175 00
Lower Fraser "			7												620 00	1,775 00	2,395 00
WilliamsLake "				16			6								650 00	2,885 00	3,535 00
Kamloops-Okanagan Agency			11	18	1		14					1			5,115 00	6,600 00	11,715 00
Kootenay "			3	4	1	4	4		3			1			1,747 50	1,685 00	3,432 50
Northwest Coast "			12				7		5	4	11	9	1		100 00	3,650 00	3,750 00
Babine and Upper Skeena River Agency			21	21	13		1					1			3,355 00	4,025 00	7,380 00
Total			98	60	19	6	33		8	4	11	12	1		12,362 50	29,510 00	41,872 50
Manitoba.																	
Clandeboye Agency			1	4											985 00	600 00	1,585 00
Portage la Prairie Agency				7			5								75 00	450 00	525 00
Manitowapah "				18					11		12				40 00	1,335 00	1,375 00
Rat Portage "																	
Berens River "	12			8											80 00	800 00	880 00
The Pas "				10			2		7		1	1			93 00	890 00	983 00
Total	12		1	47			7		18		13	1			1,273 00	4,075 00	5,348 00

AGRICULURAL AND INDUSTRIAL STATISTICS.—*Continued.*

SOURCES AND VALUE OF INCOME.

Agency.	Value of Farm Products, including Hay.	Wages Earned.	Received from Land Rentals.	The Estimated Value of Fish and Meat used for Food is included in these columns.		Earned by Other Industries.	Total Income of Indians.
				Earned by Fishing.	Earned by Hunting.		
New Brunswick.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Richibucto Superintendency	7,400 00	14,600 00		7,175 00	725 00	5,200 00	35,100 00
Fredericton "	5,275 00	25,274 00		451 00	5,325 00	10,050 00	46,375 00
Total	12,675 00	39,874 00		7,626 00	6,050 00	15,250 00	81,475 00
Prince Edward Island.							
Prince Edward Island Superintendency	1,544 00	280 00		385 00	64 00	15,780 00	18,053 25
Nova Scotia.							
Annapolis County	75 00	700 00		75 00	250 00	300 00	1,400 00
Shelburne "	279 00	2,100 00		30 00	853 00	285 00	3,547 70
Digby "	328 00	1,000 00		100 00	700 00	500 00	2,628 00
Yarmouth "	10 00			1,500 00	1,000 00	1,145 00	3,655 00
King's "	483 00	1,600 00		50 00	200 00	1,000 00	3,333 00
Queen's "	487 00	809 00		150 00	100 00	1,080 00	2,617 00
Halifax "	325 00	1,900 00		150 00	250 00	3,500 00	6,125 00
Hants "	2,595 00	400 00		100 00	1,000 00	2,000 00	6,095 00
Colchester "	115 00	2,275 00		50 00	400 00	1,410 00	4,250 00
Cumberland "	450 00	2,000 00		20 00	800 00	1,000 00	4,270 00
Pictou "		6,000 00					6,000 00
Antigonish and Guysborough Counties	500 00	800 00		300 00	50 00	5,000 00	6,650 00
Richmond County	750 00	850 00		1,695 00	100 00	1,625 00	5,020 00
Inverness "	1,850 00	2,194 00	95 00	300 00	80 00	2,300 00	6,819 00
Victoria "	2,270 00	1,100 00		400 00	450 00	2,950 00	7,170 00

Cape Breton "	2,500 00	378 00		500 00	50 00	2,500 00	5,928 00
Lunenburg "	1,045 00	1,000 00		125 00	50 00	1,050 00	3,270 00
Total	14,062 70	25,097 00	95 00	5,545 00	6,333 00	27,645 00	78,777 70
British Columbia.							
Cowichan Agency	28,765 00	23,975 00		53,185 00	4,265 00	3,140 00	113,330 00
West Coast "	676 60	8,970 00		26,800 00	4,350 00	108,549 00	149,345 60
Kwawkewlth "	227 50	34,250 00		23,710 00	7,900 00	7,400 00	73,487 50
Lower Fraser "	46,175 35	93,230 00	272 90	94,090 30	63,288 50	45,947 70	343,004 75
Williams Lake Agency	45,808 25	28,800 00		13,940 00	10,380 00	11,800 00	110,728 25
Kamloops-Okanagan Agency	97,456 80	97,700 00		23,150 00	25,950 00	28,600 00	272,856 80
Kootenay "	18,176 00	3,150 00		550 00	3,400 00	700 00	25,976 00
Northwest Coast "	16,945 00	6,935 00	50 00	133,410 00	33,750 00	33,730 00	224,820 00
Babine and Upper Skeena River Agency	12,337 00	29,685 00		39,405 00	45,560 00	30,345 00	157,332 00
Total	266,567 50	326,695 00	322 90	408,240 30	198,843 50	270,211 70	1,470,880 90
Manitoba.							
Clandeboye Agency	16,650 00	82,500 00		85,000 00	5,600 00	4,300 00	194,050 00
Portage la Prairie Agency	4,560 00	5,700 00		370 00	1,000 00	2,600 00	14,230 00
Manitowapah "	6,443 00	4,568 00		4,180 00	6,480 00	3,097 00	24,768 00
Rat Portage "	50 00	550 00		140 00	275 00	125 00	1,140 00
Berens River "	12,955 00			12,073 00	20,200 00	13,826 00	59,054 00
The Pas "	3,906 75	2,857 25		3,071 75	24,810 00	996 75	35,642 50
Total	44,564 75	96,175 25		104,834 75	58,365 00	24,944 75	328,884 50

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

REALTY OF INDIANS.

Agency.	Land.		Public Buildings, Property of the Band.						Private Fencing and Buildings.				
	Cleared, including natural pasturage.	Cultivated, including made pasturage.	Churches.	Council Houses.	School Houses.	Driving Sheds.	Other Buildings.	Ferries.	Acres Fenced.	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.
Northwest Territories.	Acres.	Acres.											
Touchwood Hills Agency, Treaty No. 4	89,515	502	1	1	3	.....	.....	.....	460	.....	.....	.....	104
Birtle " " 4	61,321	3,531	4	.....	2	.....	3	.....	11,847	.....	.....	8	122
Pelly " " 4	47,377	400	4	.....	4	3	16	1	187	.....	.....	.....	97
Qu'Appelle " " 4	165,008½	1,812½	2	.....	.....	.....	2	.....	1,787½	.....	.....	1	176
Assiniboine " " 4	23,494	525	.....	.....	.....	.....	.....	.....	525	.....	.....	.....	48
Crooked Lakes " " 4	161,592	884	.....	.....	.....	.....	1	.....	1,670	.....	.....	.....	110
Moose Mountain " " 4	53,550½	489½	.....	.....	.....	.....	.....	.....	850	.....	.....	.....	55
Pine Creek " " 4	4,632	20	.....	1	1	.....	1	.....	6	.....	.....	.....	25
Saddle Lake " " 6	72,973	287	.....	.....	4	.....	2	.....	1,555	.....	.....	.....	129
Hobbema " " 6	68,600	1,260	.....	.....	1	.....	1	.....	679	.....	.....	.....	81
Battleford " " 6	167,658	1,418	.....	.....	.....	.....	.....	.....	2,792	.....	.....	.....	182
Onion Lake " " 6	102,376	123	.....	.....	1	.....	.....	.....	123	.....	.....	1	87
Duck Lake " " 6	98,499¼	828¾	2	.....	2	.....	.....	1	1,435	.....	.....	.....	106
Edmonton " " 6	47,798	2,050	.....	.....	.....	.....	1	.....	2,228	.....	.....	.....	100
Carlton " " 6	139,181	787	2	.....	7	.....	3	.....	999	.....	.....	.....	67
Sarcee " " 7	38,909	211	1	.....	2	.....	.....	.....	325	.....	.....	.....	45
Blood " " 7	349,275½	51½	.....	.....	3	.....	3	.....	600	.....	.....	1	210
Blackfoot " " 7	300,024¼	175¾	.....	.....	.....	.....	.....	.....	2,013	.....	.....	3	116
Peigan " " 7	114,616	680	.....	.....	1	.....	1	1	680	.....	.....	7	94
Stony " " 7	45,565	155	1	.....	2	1	.....	.....	1,350	.....	.....	.....	117
Total	2,151,965	16,191	17	2	33	4	34	3	32,111½	.....	.....	21	2,071

SESSIONAL PAPER No. 27

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

REALTY OF INDIANS—*Concluded.*

Agency.	Private Buildings—*Concluded.*									
	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	Root Houses.	Milk Houses.	Corn Cribs.
NORTHWEST TERRITORIES.										
Touchwood Hills Agency Tr'ty No. 4..	.....	.....	13	...	132	2	6	.....	3	....
Birtle " " 4..	56	2	82	1	114	4	37	10	5	....
Pelly " " 4..	16	.....	50	.....	144	..	18	6	10	....
Qu'Appelle " " 4..	.....	....	44	....	164	2	....	2	1	3
Assiniboine " " 4..	.....	.. .	5	.....	31	.....	.. ..	.....	....	....
Crooked Lakes " " 4..	4	....	11	.....	87	6	18	108	10	....
Moose Mountain " " 4..	54	.....	8	....	51	...	.....	.....	.....	....
Pine Creek " " 4..	....	.....	4	....	9	1	8	15	9	....
Saddle Lake " " 6..	.....	....	.....	.....	119	....	10	1	.....	....
Hobbema " " 6..	20	.....	43	.....	31	5	20	55	.....	....
Battleford " " 6..	.....	.....	13	.....	164	31	12	41	.....	....
Onion Lake " " 6..	....	....	....	.....	82	.....	.....	.....	.....	....
Duck Lake " " 6..	... ..	.....	12	.....	125	6	35	.....	8	....
Edmonton " " 6..	1	.....	49	.....	58	14	17	7	.....	....
Carlton " " 6..	177	2	46	.....	121	3	22	6	11	...
Sacree " " 7..	.....	.....	15	.....	.....	.....	.....	.....	3	....
Blood " " 7..	.....	.....	70	.....	92	.....	...	18	2	....
Blackfoot " " 7..	.....	.....	24	.....	16	.....	.....	1	1	...
Peigan " " 7..	.....	.....	33	...	21	.....	4	20	2	...
Stony " " 7..	.....	....	35	.....	15	.....	.....	20	.....	....
Total.....	328	4	557	1	1,576	74	207	310	65	3

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS.

Agency.	Agricultural Implements, Vehicles, &c.															
	Ploughs.	Harrows.	Seed Drills.	Cultivators.	Land Rollers.	Mowers.	Reapers.	Horse Rakes.	Fanning Mills.	Threshing Machines.	Tool Chests.	Other Implements.	Wagons.	Carts.	Sleighs, Draught.	Sleighs, Driving.
Northwest Territories.																
Touchwood Hills Agency, Treaty No. 4	3	2	2	1	2	40	3	38	.....	2	2	248	60	20	38	17
Birtle " " 4	111	64	21	3	3	53	17	41	6	1	1	1,175	113	31	89	29
Pelly " " 4	49	22	2	.....	.....	37	1	35	1	1	.....	377	67	29	49	.....
Qu'Appelle " " 4	139	62	9	4	2	61	10	44	7	8	5	1,514	100	47	80	35
Assiniboine " " 4	35	9	1	.....	.....	7	.....	5	1	.....	1	10	20	10	15	.....
Crooked Lakes " " 4	94	47	11	.....	11	38	11	25	6	.....	.....	688	59	32	43	.....
Moose Mountain " " 4	37	18	1	.....	1	9	3	7	1	.....	.....	409	19	11	29	.....
Pine Creek " " 4	3	1	.....	.....	.....	1	.....	1	.....	.....	1	50	5	.....	6	7
Saddle Lake " " 6	24	10	1	.....	.....	26	1	24	.....	.....	.....	199	48	25	69	.....
Hobbema " " 6	97	44	3	2	5	28	4	15	1	.....	4	726	62	59	69	81
Battleford " " 6	128	56	.....	.....	.....	50	8	32	4	1	1	1,255	86	24	83	10
Onion Lake " " 6	38	15	.....	.....	.....	15	.....	13	2	.....	1	650	24	11	24	.....
Duck Lake " " 6	73	35	2	.....	.....	33	6	26	4	.....	4	1,246	49	30	39	33
Edmonton " " 6	47	27	5	2	4	21	5	21	7	2	.....	221	25	27	11	4
Carlton " " 6	69	46	.....	.....	.....	23	6	22	3	1	6	728	46	39	70	82
Sarcee " " 7	.....	.....	1	.....	1	7	.....	4	.....	.....	.....	140	10	5	10	7
Blood " " 7	3	2	.....	.....	.....	56	.....	56	.....	.....	7	2,000	178	.....	.....	70
Blackfoot " " 7	43	19	1	2	2	36	2	32	.....	.....	1	250	74	.....	13	29
Peigan " " 7	30	6	.....	.....	.....	24	.....	24	.....	.....	1	290	98	.....	.....	.....
Stony " " 7	10	4	.....	.....	.....	13	.....	13	.....	.....	.....	40	30	.....	35	.....
Total	1,033	489	60	14	31	578	77	478	43	16	35	12,216	1,173	400	772	404

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS—*Continued.*

Agency.	Agricultural Implements, Vehicles, &c.—*Con.*		Value of Implements and Vehicles.	Live Stock and Poultry.												
				Horses.			Cattle.					Other Stock.				
	Democrat Wagons.	Buggies and Road Carts.		Stallions and Geldings.	Mares.	Colts, Fillies and Foals.	Bulls.	Oxen, Work.	Steers.	Cows, Milch.	Young Stock.	Sheep.	Lambs.	Boars, Breeding.	Sows, Breeding.	Pigs.
NORTHWEST TERRITORIES.			$ cts.													
Touchwood Hills Agency, Treaty No. 4	5	18	7,061 00	56	261	67	18	36	164	357	455	.....	.....	.....	.....	.....
Birtle " " 4	24	64	14,906 00	268	210	4	12	26	185	303	264	14	.....	.....	4	11
Pelly " " 4	2	18	6,903 50	51	76	51	12	33	197	251	380	165	.....	.....	.....	.....
Qu'Appelle " " 4	18	27	15,385 00	342	318	44	16	46	301	354	649	6	.....	.....	.....	2
Assiniboine " " 4	.....	.....	1,800 00	25	40	21	..	38	24	25	48	.....	.....	.....	.....	14
Cr oked Lakes " " 4	1	38	12,193 00	126	107	49	10	56	87	217	355	31	.....	.....	.....	..
Moose Mountain " " 4	3	15	2,800 00	87	59	21	11	22	34	94	137	.....	.....	.....	.....	.....
Pine Creek " " 4	.....	4	300 00	4	9	1	2	2	7	16	10	.....	.....	1	1	.....
Saddle Lake " " 6	1	14	6,756 00	121	93	31	12	69	139	258	358	54	17	.....	.....	4
Hobbema " " 6	.....	9	8,275 00	.....	600*	.....	1	19	33	280	428	.....	.....	.....	.....	4
Battleford " " 6	5	22	12,940 00	.....	489*	.....	20	170	258	596	886	187	.....	.....	.....	121
Onion Lake " " 6	.....	.....	3,575 00	95	90	55	7	73	182	285	287	.....	.....	.....	.....	.....
Duck Lake " " 6	1	23	9,750 00	110	104	22	17	88	199	279	376	25	.....	.....	.....	22
Edmonton " " 6	1	13	5,136 00	64	79	46	12	49	88	190	153	48	.....	.....	.....	39
Carlton " " 6	4	24	7,363 00	99	95	23	16	117	110	255	292	.....	.....	.....	.....	19
Sarcee " " 7	3	4	900 00	450	600	200	.....	2	7	24	29	.....	.....	.....	.....	.....
Blood " " 7	11	37	32,174 00	.....	3,519*	.....	54	.....	550	765	1,143	.....	.....	.....	.....	.....
Blackfoot " " 7	.....	16	7,053 00	.....	2,848*	.....	15	.....	54	234	492	.....	.....	.....	.....	.....
Peigan " " 7	10	8	7,169 00	280	480	490	.....	.....	77	385	744	.....	.....	.....	.....	.....
Stony " " 7	1	5	3,796 00	.....	1,000*	.....	12	.....	101	244	214	.....	.....	.....	.....	.....
Total	90	359	166,235 50	2,178	11,077	1,125	247	846	2,797	5,412	7,700	530	17	1	5	236

*Includes also stallions, geldings, colts, fillies and foals.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PERSONALTY OF INDIANS—*Concluded.*

Agency.	Live Stock and Poultry—*Concluded.*					General Effects.									Household Effects.	
	Poultry.				Value of Live Stock and Poultry.	Sail Boats.	Row Boats.	Canoes.	Rifles.	Shot Guns.	Nets.	Steel Traps.	Tents.	Value of.	Value of.	Value of Real and Personal Property.
	Turkeys.	Geese.	Ducks.	Cocks and Hens.												
Northwest Territories.					$ cts.									$ cts.	$ cts.	$ cts.
Touchwood Hills Ag'cy, Treaty No. 4.	....	15	....	75	34,135 00	....	....	.....	56	69	4	1,582	163	3,500 75	3,427 00	408,832 75
Birtle " " 4.	5	....	....	861	30,388 00	....	5	1	47	104	9	672	164	2,235 00	7,170 00	333,307 00
Pelly " " 4.	....	6	....	86	29,616 00	2	1	46	16	93	61	425	101	2,451 00	3,580 00	211,831 50
Qu'Appelle " " 4.	....	....	....	....	68,761 00	....	6	.....	29	91	30	195	190	2,584 00	7,400 00	720,204 00
Assiniboine " " 4.	....	....	....	50	4,500 00	....	....	.....	....	25	....	12	36	270 00	650 00	156,533 35
Crooked Lakes " " 4.	....	....	....	.....	19,549 00	....	....	.....	2	24	11	6	107	624 00	1,375 00	593,608 00
Moose Mountain " " 4.	....	....	....	....	9,985 00	....	....	.....	14	23	3	63	38	375 00	1,650 00	299,648 00
Pine Creek " " 4.	....	....	....	10	1,375 00	3	2	8	3	18	45	130	15	350 00	500 00	38,347 00
Saddle Lake " " 6.	....	....	....	.....	26,844 00	1	25	63	11	99	127	546	104	3,241 00	2,435 00	241,981 00
Hobbema " " 6.	....	....	....	25	20,825 00	....	....	3	20	100	110	249	125	1,562 00	1,835 00	232,722 00
Battleford " " 6.	....	....	....	230	59,018 00	....	5	.....	43	89	27	189	134	3,100 00	6,560 00	287,746 00
Onion Lake " " 6.	....	....	....	55	25,299 00	....	....	20	9	88	73	280	146	2,059 00	2,300 00	279,816 00
Duck Lake " " 6.	....	....	....	345	32,669 25	....	3	8	25	94	30	766	98	2,247 50	11,385 00	97,481 75
Edmonton " " 6.	19	....	17	223	20,437 20	....	....	10	14	75	55	225	65	780 00	2,100 00	450,375 20
Carlton " " 6.	....	....	....	121	19,468 50	....	5	103	62	174	90	1,585	184	4,553 50	3,052 00	490,401 00
Sarcee " " 7.	....	....	....	60	10,000 00	....	....	.....	15	12	.....	25	43	500 00	1,700 00	161,340 00
Blood " " 7.	....	....	....	60	88,856 00	....	....	.....	45	10	.....	40	125	1,425 00	4,200 00	901,481 00
Blackfoot " " 7.	....	....	....	....	41,978 00	....	8	.....	65	35	30	12	125	1,578 00	2,000 00	971,158 75
Peigan " " 7.	....	....	....	.....	37,735 00	....	....	.....	20	40	.....	.....	95	890 00	2,700 00	536,883 00
Stony " " 7.	....	....	....	.....	27,295 00	....	....	....	125	30	5	200	125	3,401 00	10,000 00	194,002 00
Total....	24	21	17	2,201	608,733 95	6	60	262	621	1,293	710	7,202	2,183	37,726 75	76,019 00	7,607,699 10

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

AGRICULTURE, SEASON 1900.

Agency.	Grain, Roots and Fodder.															
	Wheat.		Oats.		Barley.		Corn.		Pease.		Rye.		Buckwheat.		Beans.	
	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.
NORTHWEST TERRITORIES.																
Touchwood Hills Agency, Treaty No. 4	12	152	95	3,553	¼	12	....	....	....	.. .	.....	.. ...	....	.. ...	.....	...
Birtle " " 4	1,449	5,193	460½	2,049	17	158	26	82	¼	....	.....	.....	..	.....	.....	....
Pelly " " 4	....	.....	96	587	64	431	....	....	....	....	.....	.....	.....	.....	. ..	.....
Qu'Appelle " " 4	560	2,610	387	6,541	....	.....	3	35	....	....	.....	.....	.....	.....	....	.....
Assiniboine " " 4	200	150	15	.....	12	45	1	.....	⅛	....	....	.....	.....	.....	.....	.....
Crooked Lakes " " 4	525	1,060	115	32	....	.....	....	.....	....	....	.....	.....	....	....	....	.....
Moose Mountain " " 4	320	485	64	30	14	.....	....	....	...	....	....	.....	....	....	.....	.....
Pine Creek " " 4	.....	.....	.....	.....	.....	.....	⅛	10	..	....	.....	. ...	...	.....	.....	....
Saddle Lake " " 6	164½	938	89	1,193	1	.....	....	.....	....	..	.....	. ...	....	.....	.....	.....
Hobbema " " 6	389	3,695	81	1,504	23	206	....	..	....	....	. .	.....	....	....	.....	.....
Battleford " " 6	357¼	9,597	188	7,564	18	381	....	....	....	....	.....	.. .	.. ..	.....	....	.....
Onion Lake " " 6	.....	.....	25	769	50	1,610	....	...	....	....	... .	...	...	.....	.....	.....
Duck Lake " " 6	515	3,913	247	2,459	24	193	....	.....	....	....	.....	.....	.. ..	....	.....	. .
Edmonton " " 6	95	536	209	2,734	28	720	....	.....	...	....	.....	....	....	....	....	.....
Carlton " " 6	304	3,601	110¾	2,189	30½	603	....	.....	....	..	. .	.....	.....	....	. ....	.....
Sarcee " " 7	.....	.....	151	3,028	.....	.....	....	.....	...	....	.....	.....	....	.....	.....	.....
Blood " " 7	.....	.....	.....	.....	.....	.....	....	.....	....	....	.....	.....	.....	.....	.....	.....
Blackfoot " " 7	.....	.....	91	2,101	.....	.....	...	.....	....	....	. ...	.....	.....	.....	.....	.....
Peigan " " 7	.....	.....	.....	.....	.....	.....	....	.. .	....	....	..	.....	....	.....	.....	.....
Stony " " 7	.....	.....	130	*	.....	... .	....	.....	....	....	15	*	.....	.....	.....	....
Total	4,890¾	31,930	2,554¼	36.333	281¾	4,359	30⅛	127	⅜	...	15	.....	.....	.....	.....	.....

* Used for fodder.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

AGRICULTURE, SEASON 1900—*Concluded.*

Agency.	Grain, Roots and Fodder—*Concluded.*										Other Fodder.	New Land Improvements.			
	Potatoes.		Carrots.		Turnips.		Other Roots.		Hay.						
	Acres Planted.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Acres Sown.	Bushels Harvested.	Cultivated.	Wild.		Land Cleared.	Land Broken.	Land Cropped for First Time.	Land Fenced.
NORTHWEST TERRITORIES.									Tons.	Tons.	Tons.	Acres.	Acres.	Acres.	Acres.
Touchwood Hills Agency, Treaty No. 4	15	1,488	2¼	141	5¾	426	1¼	102	3	3,149	180	.....	5	5	135
Birtle " " 4	46¾	2,237	6¼	7	11¾	273	2¼	.....	3	1,432	242½	....	28	54	443
Pelly " " 4	25	325	3	*	4	*	.....	.....	...	2,266	75	.....	.....	.....	.....
Qu'Appelle " " 4	23	3,686	1¼	77	14½	1,915	4¼	410	.....	4,094	536	.....	476	314	209
Assiniboine " " 4	15	300	3	*	12	350	3½	*	.....	600	.....	..	25	20	35
Crooked Lakes " " 4	9	1,025	4	*	3	*	.....	.....	.....	1,800	.....	.....	70	.....	220
Moose Mountain " " 4	3½	95	.....	.....	.....	.....	6½	75	.....	1,020	55	.....	.....	.....	.....
Pine Creek " " 4	3	300	¼	15	½	40	½	10	.....	130	.....	.....	3	.....	3
Saddle Lake " " 6	23	2,294	3½	27	7½	520	2½	12	.....	2,693	.....	.....	14	.....	.....
Hobbema " " 6	13½	1,935	5¼	42	18	636	5¼	18	..	3,240	650	.....	37	.....	.....
Battleford " " 6	32½	4,925	6⅛	400	18½	1,605	7⅛	‡ 220	10	4,000	380	.....	321	141	216
Onion Lake " " 6	11½	2,100	†	35	†	550	8	60	.....	2,300	175	.....	15	.....	.....
Duck Lake " " 6	29	1,767	2⅛	61	8¼	207	1½	107	.....	3,023	290	...	58	46	52
Edmonton " " 6	13¼	2,601	3	69	6	255	2½	35	.....	1,840	250	.....	77	77	77
Carlton " " 6	23¾	3,036	2¼	166	4¼	499	2¼	159	.....	1,897	373	.....	99	82	158
Sarcee " " 7	4¼	419	1⅛	29	3¾	405	5	100	23	470	75	.....	15	4½	25
Blood " " 7	.....	.....	.. ...	.....	...	.....	.....	... ...	.....	2,611	.....	.....	.....	.....	.....
Blackfoot " " 7	12¼	453	1¼	25	2½	60	.....	.....	.....	1,227	.....	.....	42	44	.....
Peigan " " 7	14	1,800	1½	200	2	300	½	50	...	450	....	.....	.....	.....	.....
Stony " " 7	15	500	1	*	.....	.....	.....	.....	.....	200	60	.....	35	25	50
Total	332¼	31,286	47⅛	1,294	121½	8,041	47⅞	1,358	39	38,442	3,141½	.....	1,320	812½	1,623

* Not given. † Grown in gardens. ‡ Onions.

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Continued.*

PROGRESS DURING THE YEAR ENDED JUNE 30, 1901.

Agency.	Buildings Erected.														Increase in Value.		
	Dwellings, Stone.	Dwellings, Brick.	Dwellings, Frame.	Dwellings, Log.	Shanties.	Barns.	Horse Stables.	Driving Sheds.	Cattle Stables.	Pig Sties.	Store Houses.	Root Houses.	Milk Houses.	Corn Cribs.	Value of Clearing, Cultivating and Fencing.	Value of Buildings.	Increased value of Agricultural Products and Industries.
Northwest Territories.															$ cts.	$ cts.	$ cts.
Touchwood Hills Agency, Treaty No. 4	....	....	....	24	....	....	1	....	17	....	....	....	....	....	665 00	1,475 00	2,140 00
Birtle " " 4	....	....	1	18	1	1	11	....	20	3	13	3	1	....	580 00	2,375 00	2,955 00
Pelly " " 4	....	....	....	2	3	....	3	....	6	....	....	....	....	....	.....	370 00	370 00
Qu'Appelle " " 4	....	....	....	6	....	....	1	....	8	....	....	....	....	....	3,335 00	600 00	3,935 00
Assiniboine " " 4	....	....	....	....	....	....	2	....	....	....	....	....	....	....	100 00	125 00	225 00
Crooked Lakes " " 4	....	....	....	1	....	....	2	....	....	....	....	....	....	....	395 00	100 00	495 00
Moose Mountain " " 4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	.....
Pine Creek " " 4	....	....	....	....	....	....	....	....	2	....	....	....	....	....	15 00	40 00	55 00
Saddle Lake " " 6	....	....	....	3	....	....	....	....	17	....	....	....	....	....	57 00	380 00	437 00
Hobbema " " 6	....	....	....	7	....	....	....	....	....	....	....	....	....	....	150 00	200 00	350 00
Battleford " " 6	....	....	....	10	....	....	2	....	11	31	5	14	....	....	1,526 00	1,235 00	2,761 00
Onion Lake " " 6	....	....	....	1	....	....	....	....	....	....	....	....	....	....	30 00	50 00	80 00
Duck Lake " " 6	....	....	....	14	....	....	....	....	6	....	....	....	....	....	282 00	2,230 00	2,512 00
Edmonton " " 6	....	....	....	8	....	....	....	....	5	....	....	....	....	....	1,306 00	1,110 00	2,416 00
Carlton " " 6	....	....	....	3	6	....	1	....	4	....	2	....	....	....	356 00	560 00	916 00
Sarcee " " 7	....	....	....	4	....	....	3	....	2	....	....	....	....	....	300 00	700 00	1,000 00
Blood " " 7	....	....	....	10	....	....	5	....	6	....	....	....	....	....	.....	510 00	510 00
Blackfoot " " 7	....	....	....	7	....	....	2	2	6	....	....	....	....	....	42 00	158 00	200 00
Peigan " " 7	....	....	7	....	....	....	1	....	....	....	....	....	....	....	.....	1,400 00	1,400 00
Stony " " 7	....	....	....	10	....	....	15	....	....	....	....	20	....	....	300 00	1,675 00	1,975 00
Total	....	....	8	128	10	1	49	2	110	34	20	37	1	....	9,439 00	15,293 00	24,732 00

AGRICULTURAL AND INDUSTRIAL STATISTICS—*Concluded.*

SOURCES AND VALUE OF INCOME.

Agency.	Value of Farm Products, Including Hay.	Wages Earned.	Received from Land Rentals.	The Estimated Value of Fish and Meat used for Food is Included in these Columns.		Earned by other Industries.	Total Income of Indians.
				Earned by Fishing.	Earned by Hunting.		
Northwest Territories.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Touchwood Hills Agency, Treaty No. 4	9,059 50	1,350 00		185 00	16,950 00	1,712 00	29,256 50
Birtle " " 4	11,909 60	13,825 00		865 00	4,575 00	4,559 85	35,734 45
Pelly " " 4	5,154 80	3,739 85		3,975 00	9,950 00	5,213 35	28,033 00
Qu'Appelle " " 4	18,440 00	6,243 00		1,505 00	2,085 00	11,245 86	39,518 86
Assiniboine " " 4	3,500 00	1,005 00			900 00	2,050 00	7,455 00
Crooked Lakes " " 4	4,556 00	150 00		600 00		5,191 00	10,497 00
Moose Mountain " " 4	4,670 00	900 00		200 00	1,550 00	4,700 00	12,020 00
Pine Creek " " 4	360 00	500 00		1,000 00	400 00		2,260 00
Saddle Lake " " 6	10,255 00	604 50		615 00	2,740 00	3,557 43	17,771 93
Hobbema " " 6	9,750 00	825 00		850 00	675 00	475 00	12,575 00
Battleford " " 6	29,356 00	1,510 00		425 00	1,025 00	1,950 00	34,266 00
Onion Lake " " 6	11,377 00	1,530 00		2,600 00	9,500 00	6,500 00	31,507 00
Duck Lake " " 6	14,222 52	2,339 79		3,300 00	6,127 50	1,782 74	27,772 55
Edmonton " " 6	2,880 00	1,350 00	2,000 00	2,100 00	5,800 00	12,800 00	26,930 00
Carlton " " 6	12,300 20	2,916 10		9,868 00	43,846 60	1,693 90	70,624 80
Sarcee " " 7	4,990 00	700 00			700 00	3,500 00	9,890 00
Blood " " 7	15,929 51	4,905 00	658 00		500 00	7,329 24	29,321 75
Blackfoot " " 7	4,368 00	7,400 00		30 00	500 00	9,550 00	21,848 00
Peigan " " 7	2,520 00	300 00		40 00	60 00	6,135 75	9,055 75
Stony " " 7	1,300 00	3,000 00		300 00	4,000 00	6,840 95	15,440 95
Total	176,898 13	55,093 24	2,658 00	28,458 00	111,884 10	96,787 07	471,778 54

INDIAN WOMEN WHO HAVE COMMUTED THEIR ANNUITY BY A TEN YEARS' PURCHASE ($50) UNDER SECTION 11 OF THE INDIAN ACT.

Commutations of Annuity, 1900-01.

Treaty No. 1.

St. Peter's Band—Johanna Matthews, No. 480.
" Mrs. Chas. Bird, *nee* Emma Spence, No. 491.

Treaty No. 2.

Fairford Band—Mrs. Jas. Cook, No. 13.
" Mrs. Albert Partridge, No. 28.
" Henrietta Sinclair, No. 24.
Sandy Bay Band—Mrs. W. O'Neill, No. 94.
" Sarah Spence, No. 80.
" Angelique Hart, No. 99.

Treaty No. 3.

Long Sault Band—Mrs. A. Wheeler, No. 22.

Treaty No. 4.

Cowesess Band—Ellen Silman, No. 164.
" Virgine Peltier, No. 135.
Pasqua's Band—Nancy Johnston, No. 83.
Coté Band—Jessie Simpson, No. 169.

Treaty No. 5.

Blood Vein River Band—Elizabeth Monkman, No. 71.

Treaty No. 6.

Petaquakey Band—Nanette Wolf, No. 5.
Mistawasis " —Isabel Morrisette, No. 101.
Cumberland " —Mrs. Albert McKay, No. 85.
" " —Lydia Cook, No. 124.
Ermineskin's " —Mrs. Jno. Crandall, No. 1.
Louis Bull's " —Annabella J. Pruden, No. 5.
Chipewyan " —Philomine, No. 59.
" " —Judith T. Harris, No. 44.
" " —Rosalie Berland, No. 76.
Seekaskootch " —Marie Okanasis, No. 122.
" " —Nancy Berland, No. No. 84.
Weemistikooseahwasis Band—Josephine Patenaude, No. 50.
" " —Isabel Desjarlais, No. 27.
Moosomin Band—Betsey Kennedy, No. 92.
" " —Julia Macdonald, No. 110.
Sweet Grass Band—Mary C. Ouellette, No. 90.

RETURN A (1)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

HEADQUARTERS—INSIDE SERVICE.

Name.	Rank.	Annual Salary.	Date of Present Rank.	Date of First Appointment to Civil Service.
		$		
Hon. Clifford Sifton.	Superintendent General	.....	Holds this office combined with that of Minister of the Interior.	
James A. Smart....	Deputy Superintendent General	.....	Holds this office combined with that of Deputy Minister of the Interior.	
John D. McLean....	Chief Clerk and Secretary	2,250	July 1, 1897	Oct. 1, 1876
Samuel Stewart.....	" Assistant Secretary	1,900	Dec. 30, 1898	July 1, 1879
Duncan C. Scott....	" Accountant	2,050	July 6, 1893	Oct. 8, 1880
Reginald Rimmer...	" Law Clerk	2,000	June 27, 1898	June 27, 1898
William A. Orr.....	First Class Clerk, in charge of Land and Timber Branch	1,550	Aug. 1, 1894	Nov. 24, 1883
Frederick W. Smith.	First Class Clerk	1,700	Nov. 4, 1889	Oct. —, 1870
John McGirr.....	" "	1,750	Oct. 14, 1891	Aug. 1, 1877
Robert G. Dalton...	" "	1,550	Nov. 29, 1893	Sept. 12, 1871
Samuel Bray, D.L.S.	" "	1,500	July 1, 1899	June 14, 1884
Henry C. Ross	Second Class Clerk	1,400	" 1, 1886	Jan. 10, 1883
Edwin Rochester....	" "	1,400	June 5, 1890	" —, 1882
James J. Campbell..	" "	1,400	Aug. 1, 1894	Dec. 30, 1886
Hiram McKay.....	" "	1,250	Sept. 11, 1894	July 9, 1880
Martin Benson.....	" "	1,250	Dec. 1, 1884	April 1, 1876
Henry J. Brook.....	" "	1,150	July 1, 1898	Jan. 1, 1871
Alfred E. Kemp....	" "	1,150	" 1, 1898	Feb. 1, 1884
John D. Sutherland.	" "	1,150	Jan. 11, 1899	Jan. 11, 1899
John W. Shore.....	" "	1,150	July 1, 1899	Mar. 24, 1884
Jno. H. Antliff, M.A.Sc., D.T.S..	" "	1,150	" 1, 1899	July 1, 1898
Joseph Delisle.....	Junior Second Class Clerk	1,000	" 1, 1900	June 23, 1880
Fannie Yeilding	" " "	1,000	" 1, 1900	April 3, 1882
Caroline Reiffenstein	" " "	1,000	" 1, 1900	Nov. 24, 1883
Louis A. Dorval	" " "	1,000	" 1, 1900	July 1, 1886
Lizzie D. McMeekin.	" " "	1,000	" 1, 1900	Dec. 31, 1887
Geo. M. Matheson..	" " "	950	" 1, 1900	June 21, 1888
Edith H. Lyon	" " "	850	" 1, 1900	May 31, 1890
Helen G. Ogilvy....	" " "	850	" 1, 1900	June 30, 1890
Floretta K. Maracle.	" " "	850	" 1, 1900	Jan. 31, 1891
Robert B. E. Moffat.	" " "	850	" 1, 1900	Feb. 7, 1891
Mary D. Maxwell...	" " "	850	" 1, 1900	May 31, 1890
Annie C. Taylor....	" " "	750	" 1, 1900	June 30, 1890
Frederick R. Byshe..	" " "	850	" 1, 1900	Mar. 26, 1891
Louisa E. Dale.....	" " "	850	" 1, 1900	July 21, 1891
James Guthrie.....	" " "	800	" 1, 1900	" 21, 1891
Thos. P. Moffatt...	" " "	800	" 1, 1900	Oct. 14, 1891
Alice M. S. Graham.	" " "	800	" 1, 1900	Nov. 28, 1893
Frederick H. Byshe.	" " "	700	" 1, 1900	Feb. 6, 1893
Emma S. Martin....	" " "	650	" 1, 1900	Sept. 11, 1894
Chas. A. Cooke.....	" " "	600	" 1, 1901	April 1, 1893
Sarah M. O'Grady ..	" " "	600	" 1, 1901	Oct. 12, 1896
Peter Jos. O'Connor.	" " "	600	" 1, 1901	Feb. 15, 1898
Margaret H. Brennan	Writer	515	Nov. 19, 1896	Nov. 19, 1896
Gertrude A. Gorrell.	"	460	May 26, 1899	May 26, 1899
Audrey S. Jones....	"	455	Jan. 22, 1900	Jan. 22, 1900
Sarah E. Whitehead.	"	430	May 14, 1900	May 14, 1900
Effie K. McLatchie..	"	400	July 1, 1901	July 1, 1901
Benjamin Hayter....	Packer	560	" 26, 1892	" 26, 1892
William Seale.....	Messenger	480	Mar. 18, 1893	Mar. 18, 1893
John Ackland	"	360	July 28, 1899	July 28, 1899
David Morin.....	"	300	" 1, 1901	" 1, 1901

OFFICERS OF OUTSIDE SERVICE AT HEADQUARTERS.

Frederick H. Paget..	Attached to Accountant's Branch	1,600	July 1, 1897	June 5, 1885
Jas. Ansdell Macrae.	Inspector of Indian Agencies and Reserves	1,800	Oct. 1, 1892	" 14, 1881
Geo. L. Chitty.....	Inspector of Timber	1,200	June 21, 1893	" 21, 1893

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

OUTSIDE SERVICE.

ONTARIO.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
		$ cts.		
W. L. Nichols	Acting Indian Agent	825 00—With $154.50 a year for office rent and fuel	Sault Ste Marie	Batchewana, Big Head or Michipicoten and Garden River.
Adams, Joshua	Indian Land Agent	—Commission of 5 p.c. on collections	Sarnia	
Anderson, George	Indian Agent	500 00	Marysville	Mohawks of Bay of Quinté, Tyendinaga reserve.
Bennett, Edmund	"	60 00	Cormac	Algonquins of Golden Lake.
Blomfield, Charles James	Indian Land Agent	—Commission of 7½ p.c. on sales	Lakefield	Islands in River Trent.
Cameron, Edwin D	Indian Supt	1,200 00—$140 for travelling expenses, and $200 for rent	Brantford	Six Nations of Grand river.
English, Adam	Indian Agent	500 00	Sarnia	Chippewas of Aux Sables, Kettle Point and Sarnia.
J. A. Gibson	Guardian of Islands	25 00	Mallorytown	
Goulette. O. V	"	150 00	Gananoque	
Hagan, Samuel	Indian Agent	500 00—$24 office rent	Thessalon	Thessalon, Mississagi River and Thessalon Tp.
Hodder, J. F	"	800 00	Port Arthur	Ojibbewas of Lake Superior.
Hill, David Seymour	Clerk, Indian Office	900 00	Brantford	
Ironside, Alex. McG	"	720 00	Manitowaning	
Maclean, William Brown	Indian Supt	900 00.—Commission of 5 p.c. on collections; $60 office rent	Parry Sound	Parry Island, Dokis, Henvey Inlet, Nipissing, Shawanaga, Temogaming and Watha (or Gibson).
McDonald, Alex. R	Indian Agent	500 00	Duart	Moravians of the Thames.
McFarlane, William	"	325 00	Keene	Mississaguas of Mud and Rice Lakes.
McGibbon, Charles	"	500 00	Penetanguishene	Chippewas of Beausoleil, Christian Island.
McIver, John	"	500 00	Cape Croker	" Nawash, Cape Croker.
McKelvey, Alex	"	500 00	Wallaceburg	" and Pottawattamies of Walpole Island.
McPhee, Duncan J.	"	400 00	Atherley	" of Rama.
Sims, C. L. D	"	1,000 00	Manitowaning	Sucker Creek, Sheguiandah, South Bay, Maganettawan, Point Grondin, Tahgaiwinini, Whitefish River, Whitefish Lake and unceded portion of Manitoulin Island.
Smith, W	Clerk Indian Office	500 00	Brantford	
Scoffield, John	Indian Agent	500 00	Chippewa Hill	Chippewas of Saugeen.
Ferguson, W. J. C	Indian Land Agent	—Commission of 5 p.c. on collections	Wiarton	
Sinclair, A	Indian Agent	600 00	Poplar Hill	Chippewas, Munsees and Oneidas of the Thames.
Lynch, D. J	"	600 00	Hagersville	Mississaguas of the Credit.
Thackeray, John	"	325 00	Roseneath	Mississaguas of Alnwick.

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

OUTSIDE SERVICE.

ONTARIO—*Concluded.*

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
		$ cts.		
Thorburn, J. H.	Indian Agent	600 00	Gore Bay	Chippewas of Cockburn Island, Shesegwaning Obidgewong and West Bay.
Williams, Albert W.	"	100 00	Port Perry	Mississaguas of Scugog.
Yates, John	"	350 00	Virginia	Chippewas of Snake and Georgina Islands.
Arthur, R. H., M.D	Medical Officer	600 00—Paid by Bands and appropriation.		Whitefish Lake, Serpent River and Spanish River Indians.
Baxter, J., M.D	"	100 00 "		Mississagi River.
Bowman, George, M.D.	"	200 00 "		Chippewas of Beausoleil.
Carruthers, John, M.D.	"	600 00 "		Indians on Manitoulin Island.
Evans. J. W., M.D.	"	100 00—Voted by Parliament.		Indians between Chapleau and Pogamising.
Hough, H. A., M.D	"	500 00—Paid by Band.		Chippewas of Nawash.
Hay, W. W., M.D.	"	500 00 "		Indians on Walpole Island.
James, M., M.D	"	200 00—Voted by Parliament.	Mattawa	Algonquin Indians.
Johnston, J., M.D	"	250 00—Paid by Band.		Indians on Manitoulin Island.
Lapp, T. Clarke, M.D	"	275 00 "		Mississaguas of Alnwick.
McLean, John, M.D	"	150 00—Paid by Band and appro.		Chippewas of Rama.
McDonald, R., M.D	"	350 00—Paid by Band.		Mississaguas of the Credit.
McEwen, James A., M.D	"	300 00—Voted by Parliament.		Oneidas of the Thames.
McIntosh, J. W., M.D	"	1,000 00—Paid by Band		Indians on Manitoulin Island.
McPhail, D. P., M.D.	"	300 00 "		Moravians of the Thames.
Mitchell, F. H., M.D	"	260 00—Band, $200; $60 vote		Chippewas and Munsees of the Thames.
Moore, John, M.D	"	250 00—Paid by Band.		Mohawks of the Bay of Quinté.
Passmore, W. J., M.D	"	250 00 "		" "
Pringle, H. H., M.D.	"	150 00 "		Chippewas of Snake Island.
Proctor, E. L., M.D	"	37 50 "		Mississaguas of Scugog.
Reid, J. A., M.D	"	100 00 "		Garden River and Batchewana.
Secord, Levi, M.D	"	2,850 00 "		Six Nations.
Shaw, J. M., M.D	"	150 00 "		Mississaguas of Rice Lake.
Williams, R. W., M.D	"	300 00 "		Chippewas of Saugeen.
Smith, Rev. A. G.	Missionary (C.E.)	500 00 "	Deseronto	Mohawks of the Bay of Quinté.

QUEBEC.

Bastien, Antoine O	Indian Agent	425 00	Jeune Lorette	Hurons of Lorette; Quarante Arpents and Rocmont reserves.
Beaulieu, E.	"	150 00—Commission of 5 p.c.	Cacouna	Amalecites of Cacouna.

Brosseau, Alex.	"	600 00—$60 for office rent	Caughnawaga.	Iroquois of Caughnawaga.
Burwash, Adam	"	200 00	N. Temiscaming	Lake Temiscaming.
Comiré, A. O., M. D.	"	200 00	St. François du Lac	Abenakis of St. François du Lac.
Desilets, Chas. O. H., M. D.	"	100 00	Becancour	Abenakis of Becancour.
Donohue, W. T. A.	"	400 00	Pointe Blue	Montagnais of Lake St. John.
Gagné, Rev. Jacob	"	100 00	Maria	Micmacs of Maria.
Gagnon, Adolphe	"	400 00	Bersimis	Lower St. Lawrence.
Long, George	"	50 00—Commission of 10 p. c. on land rent and 2½ p. c. on distributions	St. Regis	Iroquois of St. Regis.
McCaffrey, Wm. J.	Indian Agent	600 00	River Desert	River Desert band, Maniwaki reserve.
Mulligan, E. A., M. D	Medical Officer	200 00—Paid by Band.		River Desert band.
McCartney, F. W., M. D.	"	80 00 " Quebec Fund		Micmacs of Gaspé.
Perillard, Joseph	Indian Agent	100 00	Oka	Lake of Two Mountains.
Pitre, Jeremie	"	200 00	St. Alexis de Metapedia	Micmacs of Restigouche.
De Gonzaque, Rev. Jos.	Missionary, (R.C.)	235 00	Pierreville	Abenakis of St. Francis.
Giroux, Rev. G.	"	225 96	Lorette	Hurons of Lorette.
Bourget, Rev. P.	"	125 00—Also $25 for fuel	St. Regis	Iroquois of St. Regis.
Forbes, Rev. G.	"	100 00	Caughnawaga.	" Caughnawaga.

NEW BRUNSWICK.

Carter, Wm. D.	Indian Agent	400 00	Richibucto.	Eel River, Restigouche Co.; Bathurst, St. Peter's Island and Pokemouche, Gloucester Co.; Tabusintac, Burnt Church, Eel Ground, Red Bank, Indian Point, Big Hole and Renous, Northumberland Co.; Big Cove, Indian Island and Buctouche, Kent Co.; Shediac and Fort Folly, Westmoreland Co.
Farrell, James	"	500 00—Allowed $50 for office rent.	Fredericton.	Tobique, Victoria Co.; Edmundston, Madawaska Co.; Kingsclear, St. Mary's, York Co.; Woodstock, Carleton Co.; Oromocto, Sunbury Co.
Sprague, T. F., M. D.	Medical Officer	100 00	Woodstock	
Ferguson, A. G., M. D	"	25 00	Dalhousie.	
Benson, J. S., M. D.	"	100 00	Chatham.	Northumberland County.
Desmond, J. F., M. D	"	200 00	Newcastle	" " Red Bank and Eel Ground.
McWilliam, L. J., M. D.	"	175 00	Big Cove	Kent County.
Landry, D. V., M. D.	"	40 00	Tobique.	
McAllister, D. H., M. D	"	200 00	Sussex	King's County.
Bannon, Rev. E. J.	Missionary, (R.C.)	100 00	Big Cove	
D'Amour, Rev. L. C.	"	40 00	Edmundston	
Morrisey, Rev. W.	"	100 00	Oak Point	
O'Keefe, Rev. M. A.	"	100 00	Tobique.	
Cloud, John	Constable	24 00	Eel Ground.	Northumberland County.
Saulke, John	"	20 00	Big Cove	Kent County.
Perley, Peter	Caretaker of Church	50 00	Tobique	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

OUTSIDE SERVICE.

NOVA SCOTIA.

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
		$ cts.		
Beckwith, Chas. E.	Indian Agent	50 00	Steam Mills	Micmacs of King's County.
Cameron, Rev. Angus.	"	100 00	Christmas Island	" Cape Breton County.
DeMolitor, John J. E.	"	50 00	Shelburne	" Shelburne County.
Fraser, Rev. John	"	100 00	St. Peter's	" Richmond Co., Salmon River reserve.
Harlow, Charles	"	100 00	Caledonia	" Lunenburg and Queen's Counties; Bridgewater, New Germany, Chester, Mahone Bay and Lunenburg.
McDonald, Arch. J	"	100 00	Baddeck	" Victoria County.
McDonald, John R	"	100 00	Heatherton	" Antigonish and Guysborough Counties; Afton, Pomquette Forks and Summerside reserves.
McLeod, Rev. John D	"	100 00	Eureka	" Pictou County; Indian Cove reserve.
McIsaac, Rev. Donald,	"	100 00	Glendale	" Inverness County; Malagawatch and Whycocomagh reserves.
McManus, Rev. C. E	"	50 00	Sheet Harbour	" Halifax County.
Purdy, J. H	"	50 00	Bear River	" Digby County; Indian Hill reserve.
Rand, Fred. A., M.D	"	50 00	Parrsboro'	" Cumberland County; Franklin Manor reserve (Halfway river).
Smith, Thos. B	"	50 00	Truro	" Colchester County; Millbrook reserve.
Wallace, Alonzo	"	50 00	Shubenacadie	" Hants County; Indian Brook reserve.
Wells, George	"	50 00	Annapolis	" Annapolis County; Maitland and Milford reserves.
Whalen, W. H	"	50 00	Yarmouth	" Yarmouth County.
Bissett, C. P., M.D.	Medical Officer	125 00	St. Peter's	Richmond County; Salmon River reserve.
Jacques, H., M.D.	"	50 00	Canning	King's County.
Kelly, F. H., M.D	"	50 00		Lunenburg County, East.
Macaulay, J. A., M.D	"	75 00		Inverness County, Malagawatch reserve.
MacDonald, Hugh N., M.D.	"	75 00	Whycocomagh	" Whycocomagh reserve.
McDonald, D., M.D	"	325 00	Baddeck	Victoria County.
McIntyre, D. K., M.D	"	250 00	Sydney	Cape Breton County.
McKinnon, J. C., M.D	"	150 00	Antigonish	Antigonish County.
McLean, E. D., M.D	"	150 00	Shubenacadie	Hants County; Indian Brook reserve.
McMillan, J., M.D	"	75 00	Pictou	Pictou County.
Marsh, H. A., M.D	"	75 00	Bridgewater	Lunenburg County, West.
Withers, Russell, M.D	"	50 00	Annapolis	Annapolis County.
Yorston, F. S., M.D	"	150 00	Truro	Colchester County, Millbrook reserve.

PRINCE EDWARD ISLAND.

Arsenault, John O	Indian Superintend't	300 00	Higgins Road	Lennox Island reserve, Richmond bay; Morell reserve, King's County.

BRITISH COLUMBIA.

Vowell, Arthur W	Indian Supt. and Reserve Com. for B.C.	3,000 00	Victoria	
MacLaughlin, W	Senior Clerk	1,800 00	"	
Stevens, W. A	Clerk	1,000 00	"	
McLachlan, D	Messenger	600 00	"	
Green, Ashdown H	Surveyor	1,800 00	"	
Bell, Ewen	Indian Agent	1,200 00	Clinton	Williams Lake agency.
Devlin, Frank	"	1,200 00	New Westminster	Fraser River "
Galbraith, Robert L. T	"	1,200 00	Fort Steele	Kootenay "
Guillod, Harry	"	1,200 00	Alberni	West Coast "
Irwin, Archibald	"	1,200 00	Savona	Kamloops-Okanagan agency.
Robertson, W. R	"	1,200 00	Quamichan	Cowichan "
Loring, Richard E	"	1,200 00	Hazelton	Babine "
Pidcock, Richard H	"	1,200 00	Cape Mudge	Kwawkewlth "
Todd, Chas	"	1,800 00	Metlakahtla	Northwest Coast "
Teleford, R., M.D	Medical Officer	300 00	Quamichan	Chemainus "
Rolston, P. W., M.D	"	400 00	"	Cowichan "
McKechnie, R. E., M.D	"	500 00	"	Nanaimo "
Large, R. W., M.D	"	120 00	Bella Bella	Bella Bella "
Bolton, A. E., M.D	"	240 00	Port Simpson	Port Simpson.

MANITOBA, KEEWATIN AND NORTHWEST TERRITORIES.

	Indian Commissioner's Office.			
Laird, Hon. David	Indian Commissioner	3,200 00	Winnipeg, Man	
McKenna, J. A. J	Asst. Indian Comm'r. and Chief Inspect.	2,400 00	"	
Lash, J. B	Secy. to Commiss'r	1,500 00	"	
Ponton, Arch. W	Surveyor in charge of Indian reserve surveys in N. W. T., Manitoba, Keewatin and part of Ontario	1,800 00	"	
Reid, J. L., Sr	Asst. Surveyor	1,400 00	"	
McDonald, Allan	Storekeeper	1,400 00	"	
Betournay, Geo. A., M.A	Clerk	1,200 00	"	
Jean, G. E	Clerk	1,000 00	"	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

OUTSIDE SERVICE.

MANITOBA, KEEWATIN AND NORTHWEST TERRITORIES—*Continued.*

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
	INDIAN COMMISSIONER'S OFFICE.	$ cts.		
Robson, M.	Stenographer and Typewriter	600 00	Winnipeg, Man	
Gordon, M.	Typewriter	480 00	"	
Polk, L.	Clerk	360 00	"	
Thompson, T.	Caretaker	144 00	"	
	MANITOBA SUPERINTENDENCY.			
McColl, Ebenezer	Inspector of Indian Agencies and Reserves	2,400 00	Winnipeg, Man.	Clandeboye and Berens River agencies.
Leveque, L. J. A.	Inspector of Indian Agencies and Reserves	1,800 00	Rat Portage, Ont.	Rat Portage, Couchiching and Savanne agencies.
Marlatt, Samuel R	Inspector of Indian Agencies and Reserves	1,800 00	Portage la Prairie, Man	Portage la Prairie, Manitowapah and the Pas.
Coutois, Pierre	Interpreter	360 00	" "	" " "
Campbell, M	Farmer	300 00	Swan Lake, Man	" " "
Ginn, J. C.	"	200 00	Dominion City, Man.	" " "
	TREATY NO. 2.			
Swinford, S.	Indian Agent	1,200 00	Portage la Prairie, Man	Manitowapah Agency: Sandy Bay, Lake Manitoba; Ebb and Flow Lake, Fairford, Sandy Bay (Treaty No. 2), Lake St. Martin, Crane River, Waterhen River and Pine Creek reserves.
Tucker, Geo	Farmer	20 00	Indian Ford, Man	
	TREATY NO. 3.			
Wright, J. P.	Indian Agent	1,200 00	Fort Frances, Ont	Couchiching Agency: Hungry Hall, Long Sault, Manitou, Little Forks, Couchiching, Strangecom-

	TREATY No. 5.			ing, Niacatchewenin, Nickicksconemenecanning, Seine River and Lac la Croix.
Courtney, Joseph	Indian Agent	1,000 00	The Pas, Sask	The Pas Agency: Grand Rapids (Saskatchewan River), Chemawawin, Moose Lake, The Pas, Pas Mountain, Cumberland.
Semmens, Rev. John	"	1,000 00	Berens River, Man	Berens River agency: Black River, Hollow-water River, Loon Strait, Blood Vein River, Fisher River, Jackhead River, Berens River, Pekangekun., Grand Rapids (Berens River), Poplar River, Norway House, Cross Lake.
	NORTHWEST SUPERINTENDENCY.			
McGibbon, Alex	Inspector of Indian Agencies and Reserves	2,200 00	Qu'Appelle	Birtle, Swan River, Moose Mountain, Crooked Lake, Assiniboine, File Hills, Muscowpetung and Touchwood agencies.
Chisholm, Wm. J	Inspector of Indian Agencies and Reserves	1,800 00	Battleford	Duck Lake, Carlton, Battleford, Onion Lake, Saddle Lake agencies, and White Cap Sioux, Montreal Lake and Lac la Ronge reserves.
Fiddler, M	Teamster and Interpreter	360 00		
	TREATY No. 4.			
	Birtle Agency.			
Wheatley, G. H	Indian Agent	1,200 00	Birtle, Man	Birdtail, Oak River, Oak Lake, Turtle Mountain, Keeseekoowenin, Waywayseecappo, Valley River, Gambler's and Rolling River.
Dickenson, S. M	Clerk	720 00	"	
Black, John	Interpreter	300 00	"	
Yeomans, E. H	Farmer	480 00	"	
	Pelly Agency.			
McKenzie, R. S	Indian Agent	1,000 00	Côté, Assa	Côté, Key's, and Keeseekouse reserves.
Fisher, F	Interpreter & Clerk	480 00	"	
Hunt, Jas	Labourer	300 00	"	
	Moose Mountain Agency.			
Short, J. W	Farmer in charge	900 00	Canni'gton Manor, Assa	Pheasant Rump's, Striped Blanket's and White Bear's reserves.
Murison, W	Farmer	480 00	" "	
	Crooked Lake Agency.			
Magnus, Begg	Indian Agent	1,100 00	Broadview, Assa	Ochapowace's, Kakewistahaw's, Cowesess and Sakimay's reserves.
Jowett, John W	Clerk	600 00	"	
Sutherland, J. A	Miller and Blacksmith	600 00	"	
Pollock, Isaac	Farmer	480 00	"	
Hourie, Peter	"	480 00	"	
Cameron, Henry	Interpreter	300 00	"	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

OUTSIDE SERVICE.

MANITOBA, KEEWATIN AND NORTHWEST TERRITORIES—*Continued.*

NORTHWEST SUPERINTENDENCY—*Continued.*

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
	Qu'Appelle Agency.	$ cts.		
Graham, Wm. M.	Indian Agent	1,200 00	Qu'Appelle	Little Black Bear's, Star Blanket's, Okanase, Pee-peekeesis' Piapot's, Muscowpetung's, Pasquah's and Standing Buffalo's reserves.
Ashdown, L.	Clerk	480 00	"	
Ward, Mark	Interpreter	300 00	"	
Desnomme, Jos	Herder	360 00	"	
Hockley, S	Farmer	600 00	"	
Richardson, H	"	600 00	"	
Grant, D. J.	"	480 00	"	
Finlayson, J. D.	Herder	480 00	"	
Mills, A. H.	Farmer	480 00	"	
King, D. S	"	480 00	"	
	Touchwood Hills Agency.			
Martineau, H.	Indian Agent	1,200 00	Kutawa, Assa	Muscowequan's, George Gordon's, Day Star's, Poor Man's, Fishing Lake and Nut Lake reserves.
Gooderham, J. H	Clerk	600 00	"	
Stanley, E	Farmer	480 00	"	
Favel, Chas.	"	360 00	"	
Hamilton, P. J.	"	480 00	"	
McNabb, G.	Interpreter	300 00	"	
Beatty, R	Overseer	180 00	Melfort, Sask	Kinistino band.
Harrison, J. W.	Farmer	480 00		
	Assiniboine Agency.			
Aspdin, Thos. W.	Farmer in charge	800 00	Sintaluta, Assa	Assiniboine reserve.
Kennedy, Daniel.	Labourer	300 00	"	
Indian.	Teamster	120 00		
	Duck Lake Agency.			
Jones, W. E.	Indian Agent	1,000 00	Duck Lake, Sask	One Arrow's, Okemassis, Beardy's, Checastapasin's, John Smith's, James Smith's and Cumberland reserves.
Price, Jos. H	Farmer	480 00	"	
Marion, Louis	"	480 00	"	

Letellier, J. S.	"	480 00	"	
Turcotte, N.	Interpreter	360 00	"	
McKay, A. J.	Farmer	480 00	"	
	Carlton Agency.			
Goodfellow, W. B.	Indian Agent	1,000 00	Mistawasis, Sask.	Wm. Twatt's, Petequakey's, Mistawasis, Ahtakakakoop's, Kapahawekenum's, Keeneemostayo's, Pelican Lake and Wahspaton Sioux reserves.
Jackson, T. E.	Clerk	600 00	"	
McKenzie, John	Miller	600 00	"	
McBeath, Wm	Farmer	480 00	"	
Anderson, P	"	480 00	"	
Tucker, W. R	Overseer	240 00	Saskatoon	White Cap Sioux reserve.
Garnot, P	"	180 00	Montreal Lake	Montreal Lake and Lac La Ronge reserves.
Pratt, Rupert	Interpreter	360 00	Mistawasis, Sask.	
Dreaver, J., sr	Farmer	480 00	"	Big River reserve.
	Battleford Agency.			
Day, J. P. G.	Indian Agent	1,000 00	Battleford, Sask.	Red Pheasant's, Stony, Sweet Grass, Poundmaker's, Little Pine's, Moosomin's and Thunderchild's reserves.
Johnson, C. J.	Clerk	600 00	"	
Nolan, A.	Farmer	480 00	"	
Simpson, S. S.	"	480 00	"	
Heureux, M. L.	"	480 00	"	
Jefferson, R.	"	480 00	"	
McDonald, N	T'mster& Interpreter	360 00	"	
	Onion Lake Agency.			
Sibbald, W.	Indian Agent	900 00	Onion Lake, Sask.	Seekaskootch and Chipewyan No. 124, reserves.
Lovell, L.	Farmer & Miller	600 00	"	
Taylor, Joseph	Interpreter	240 00	"	
Slater, Thos	Stockman	420 00	"	
	Saddle Lake Agency.			
Mann, G. G.	Indian Agent	1,000 00	Saddle Lake, Alta	Saddle Lake, Wahsatanow, Whitefish Lake, Lac la Biche, Chipewyan No. 130 and Beaver Lake reserves.
Tompkins, P	Farmer	480 00	"	
Batty, J	"	480 00	"	
Whitford, S.	Interpreter	300 00	"	
Mann, B. E	Clerk	180 00	"	
	Edmonton Agency.			
Gibbons, James	Indian Agent	1,000 00	Edmonton, Alta	Enoch's, Michel's, Alexander's, Joseph's and White Whale Lake reserves.
Carruthers, H. A	Clerk	660 00	"	
Bard, D.	Farmer	480 00	"	
Foley, John	Interpreter	360 00	"	
Blewett, W. G.	Farmer	420 00	"	
McGee, T.	Miller	600 00	"	

RETURN A (2)—Of Officers and Employees of the Department of Indian Affairs on July 1, 1901.

OUTSIDE SERVICE.

MANITOBA, KEEWATIN AND NORTHWEST TERRITORIES—*Concluded.*

NORTHWEST SUPERINTENDENCY—*Concluded.*

Name.	Office.	Annual Salary, &c.	Address.	Bands or Reserves in Agency.
	Hobbema Agency.	$ cts.		
Grant, Wm. S	Indian Agent	1,000 00	Hollbroke, Alta.	Samson's, Ermineskin's and Louis Bull's bands.
Fleetham, T. J.	Clerk	600 00	"	
Moore, A. E	Farmer	480 00	"	
Whitford, Gilbert	"	480 00	"	
Blanc, H	T'mster& Interpreter	360 00	"	
Indian	Miller	120 00	"	
Donaldson, John	Blacksmith.	480 00	"	
Indian	Mail Carrier	60 00	"	
	Sarcee Agency.			
McNeill, Alex. J	Indian Agent	1,000 00	Calgary, Alta	Sarcee reserve.
Hodgson, George	Interpreter	480 00	"	
Indian	Scout.	120 00	"	
Godin, Tom	Assistant Issuer.	60 00	"	
	Stony Agency.			
Sibbald, H. E	Farmer in charge	720 00	Morley, Alta	Stony reserve.
Nichol, H	Clerk	480 00	"	
Salter, W.	Herder	240 00	"	
Indian	"	180 00	"	
	Blackfoot Agency.			
Markle, J. A.	Indian Agent	1,400 00	Gleichen, Alta	Blackfoot Indians.
Race, Geo. H	Clerk and Issuer	600 00	"	
Cosgrave, W. S	Farmer	500 00	"	
Jones, A. E.	"	480 00	"	
Service, W.	"	480 00	"	
James, W. H	Interpreter	480 00	"	

	Blood Agency.			
Wilson, James	Indian Agent	1,100 00	Macleod, Alta	Blood Indians.
Black, Wm	Clerk	600 00	"	
Grant, Jas A	Farmer	480 00	"	
Damon, W	"	480 00	"	
Clarke, Clifford H	"	480 00	"	
Rhodes, F	Issuer	540 00	"	
English, John	Interpreter	300 00	"	
Indian	Scout	120 00	"	
"	"	120 00	"	
Sister St. Eusèbe	Hospital Matron	180 00	"	
" Brannigan	" Nurse	120 00	"	
" Girard	" "	120 00	"	
	Peigan Agency.			
Wilson, R. N	Indian Agent	1,000 00	Macleod, Alta	Peigan Indians.
Hollies, J	Clerk and Issuer	600 00	"	
Macdonald, R. C	Stockman	480 00	"	
Scott, Thos	Interpreter	300 00	"	
Indian	Scout	120 00	"	
	Medical Officers.			
Hanson, Thos., M. D	Medical Officer	700 00	Rat Portage, Ont	Rat Portage agency.
Moore, Robert, M. D	"	450 00	Fort Frances, Ont.	Couchiching "
Steep, J. R., M. D	"	800 00	Winnipeg, Man	Clandeboye agency; Rupert's Land and St. Boniface industrial schools.
Donovan, H. J., M. D	"	480 00	Red Deer, Alta	Red Deer industrial school.
Edwards, O. C., M. D	"	1,800 00	Macleod, Alta	Treaty 8.
Fraser, M. S., M. D	"	480 00	Brandon, Man	Brandon industrial school.
Goodwin, R., M. D	"	200 00	Elkhorn, Man	Elkhorn industrial school.
Lafferty, J. D., M. D	"	1,800 00	Calgary, Alta	Blackfoot, Sarcee and Stony agencies, and High River and Calgary industrial schools.
Macadam, S. T., M. D	"	900 00	Battleford, Sask	Battleford agency and industrial school.
Seymour, M. M., M. D	"	600 00	Fort Qu'Appelle	Qu'Appelle industrial school.
Bird, Jas. R, M. D	"	600 00	Whitewood, Assa	Crooked Lake agency.
Carthew, E. C., M. D	"	600 00	Qu'Appelle "	File Hills and Touchwood Hills agencies.
Matheson, E., M. D	"	100 00	Onion Lake, Sask	Onion Lake agency.
Kitchen, E. C., M. D	"	150 00	Prince Albert, Sask	Emmanuel College.
Ingersoll, I. F., M. D	"	500 00	Regina, Assa	Regina industrial school.
Kalbfleisch, W. H., M. D	"	600 00	Balgonie, "	Muscowpetung agency.
Bonjou, Victor, M. D	"	300 00	Sintulata, "	Assiniboine agency.
Reid, J. L., M. D	"	300 00	Prince Albert, Sask	Duck Lake agency.
Tyerman, P. D., M. D	"	1,400 00	" "	Carlton agency and Duck Lake reserves and boarding school.
Harrison, J. D., M. D	"	750 00	Edmonton, Alta	Edmonton agency.
Hardy, John G., M. D	"	300 00	Carlyle, Assa	Moose Mountain agency.

RETURN B (1)—INDIANS OF NOVA SCOTIA.

Service.	Grant.	Expenditure.	Grant not used.	Grant exceeded.
	$ cts.	$ cts.	$ cts.	$ cts.
Salaries	1,150 00	1,141 03	8 97	
Relief and seed grain	2,700 00	2,711 50		11 50
Medical attendance and medicines	3,700 00	3,676 58	23 42	
Miscellaneous and unforeseen	450 00	179 73	270 27	
	8,000 00	7,708 84	302 66	11 50

RETURN B (2)—INDIANS OF NEW BRUNSWICK.

Salaries	1,284 00	1,212 00	72 00	
Relief and seed grain	2,300 00	2,313 80		13 80
Medical attendance and medicines	3,740 00	3,741 25		1 25
Miscellaneous and unforeseen	300 00	299 97	0 03	
	7,624 00	7,567 02	72 03	15 05

RETURN B (3)—INDIANS OF PRINCE EDWARD ISLAND.

Salaries	300 00	300 00		
Relief and seed grain	925 00	724 12	200 88	
Medical attendance and medicines	650 00	592 29	57 71	
Miscellaneous and unforeseen	75 00	15 50	59 50	
	1,950 00	1,631 91	318 09	

RETURN B (4)—INDIANS OF MANITOBA AND NORTHWEST TERRITORIES

Annunities and commutations	146,968 00	146,918 00	50 00	
Implements, tools and harness	8,192 00	8,037 40	154 60	
Field and garden seeds	3,383 00	3,382 56	0 44	
Live stock	7,344 00	7,324 60	19 40	
Supplies for destitute and working Indians	202,598 00	199,481 93	3,116 07	
Triennial clothing	5,918 00	5,492 86	425 14	
Day, boarding and industrial schools	288,182 00	272,632 25	15,549 75	
Surveys	5,000 00	4,935 06	64 94	
Sioux	6,578 70	6,206 68	372 02	
Grist and saw-mills	1,113 00	1,039 41	73 59	
General expenses	143,138 50	143,457 55		319 05
	818,415 20	798,908 30	19,825 95	319 05

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RETURN B (5)—INDIANS OF BRITISH COLUMBIA.

Service.	Grant.	Expenditure.	Grant not used.	Grant exceeded.
	$ cts.	$ cts.	$ cts.	$ cts.
Salaries	20,560 00	19,838 84	721 16	
Relief of distress	4,500 00	4,571 31	.....	71 31
Seed, implements and tools	1,000 00	847 44	152 56	
Medical attendance and medicines	11,000 00	10,998 33	1 67	
Day schools	8,600 00	6,856 06	1,743 94	
Industrial and boarding schools	59,050 00	55,651 57	3,398 43	
Surveys and Reserve Commission	7,000 00	7,226 36	.....	226 36
Steamer *Vigilant*	2,000 00	662 13	1,337 87	
Travelling expenses	5,000 00	4,402 14	597 86	
Miscellaneous and office—including hospitals, irrigation, dyking and suppression of liquor traffic	10,920 00	8,388 60	2,531 40	
	129,630 00	119,442 78	10,484 89	297 67

RETURN B (6)—INDIANS OF ONTARIO AND QUEBEC.

Relief, seed, medical attendance and medicines, Quebec	5,600 00	5,301 10	298 90	
Relief, medical attendance and medicines, Ontario	2,000 00	2,118 87	.....	118 87
Blankets and clothing, Ontario and Quebec	500 00	414 68	85 32	
Schools, Ontario, Quebec and Maritime Provinces	38,965 00	38,827 83	137 17	
Salaries of Chiefs, Cape Croker and Gibson and Agent at St. Regis	150 00	150 00	.....	
Removal of Lake of Two Mountain Indians, Oka to Gibson	200 00	.....	200 00	
Robinson Treaty annuities	16,806 00	16,183 75	622 25	
Survey of Indian reserves	500 00	69 88	430 12	
For Indian Land Management Fund	14,000 00	14,000 00	.....	
Grant to Agricultural Society—Munsees of the Thames	90 00	90 00	.....	
To assist in the suppression of liquor traffic	500 00	494 12	5 88	
For the erection of a lock-up at St. Regis	500 00	173 65	326 35	
Repairs to old mission house at Caughnawaga	1,000 00	1,000 00	.....	
Road through Golden Lake Indian reserve	300 00	300 00	.....	
Claims of Jno. Harrison for value of land and improvements thereon	1,300 00	1,268 80	31 20	
Repairing Indian chapel at Maria	121 69	121 69	.....	
	82,532 69	80,514 37	2,137 19	118 87

RETURN B (7)—GENERAL.

Allowance to J. A. Macrae when acting as Half-breed and Indian Commissioner, Treaty 8	885 00	.....	*885 00	
J. A. Macrae, Inspector of Indian Agencies and Reserves	1,800 00	1,800 00	.....	
George L. Chitty, Inspector of timber	1,200 00	1,200 00	.....	
Travelling expenses of these officers	1,200 00	555 90	644 10	
	5,085 00	3,555 90	1,529 10	

* Expenditure charged to Treaty 8, Manitoba and Northwest appropriation.

INDIAN TRUST FUND.

RETURN C showing transactions in connection with the Fund during the year ended June 30, 1901.

Service.	Debit.	Credit.
	$ cts.	$ cts.
Balance, June 30, 1900		3,893,622 63
Collections on land sales; timber and stone dues; rents, fines and fees		129,357 87
Interest for year ended June 30, 1901, on above balance		161,811 65
Legislative grants to supplement the Funds		30,633 75
Outstanding cheques for 1898-99		31 49
Expenditure during the year 1900-1901	274,063 62	
Balance, June 30, 1901	3,941,393 77	
	4,215,457 39	4,215,457 39

For full details of the above expenditure from the Indian Trust Fund and the Consolidated Fund, see Part 'J' of the Auditor General's Report.